THE JOURNAL

OF THE

Michigan State Medical Society

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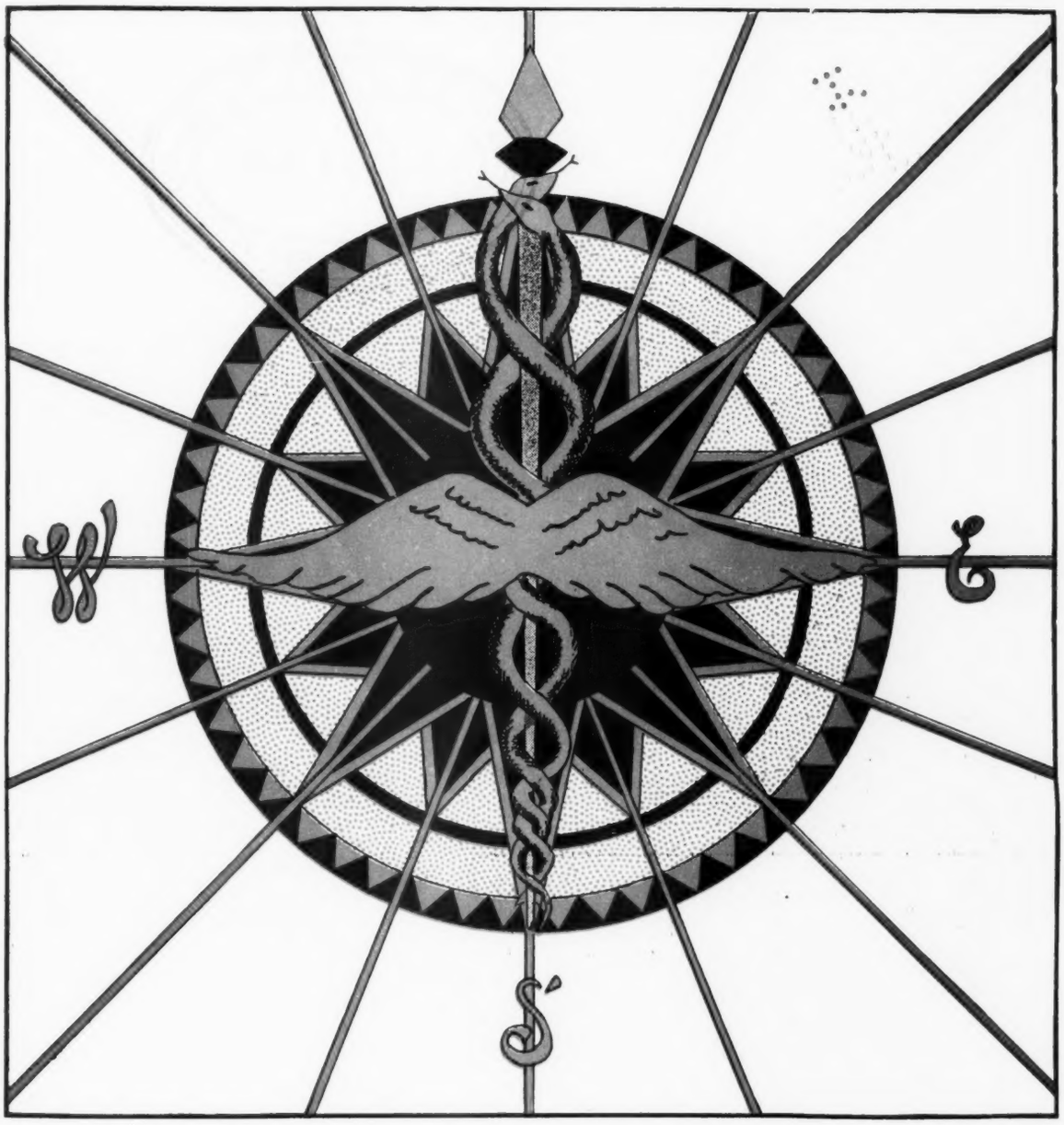

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of the Michigan State Medical Society

VOLUME 45 JULY, 1946 NUMBER 7

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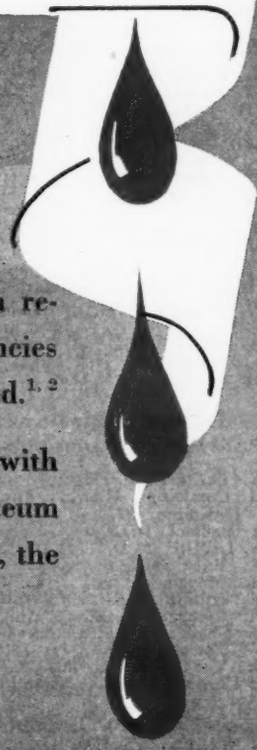

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(1) Soule, S. D.: Am. J. Obst. & Gynec. 42:1009, 1941. (2) Mason, L. W.: Am. J. Obst. & Gynec. 44:630, 1942.
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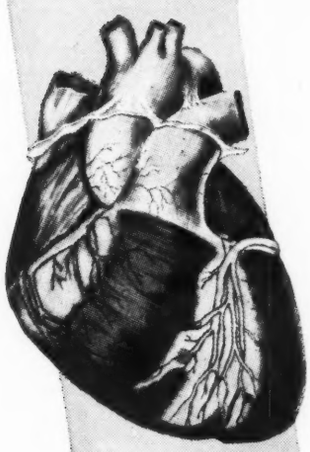

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1 Gold, H.; Cattell, M.; Modell, W.; Kwit, N. T.; Kramer, M. L., and Zahm, W.: J. Pharmacol. & Exper. Therap. *82*:187 (Oct.) 1944.
2 Gold, H.: Connecticut M. J. 9:193 (Mar.) 1945.
3 Levine, S. A.: Clinical Heart Disease, ed. 3, Philadelphia, Pa., W. B. Saunders Company, 1945, p. 273.

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MSMS 81st ANNUAL SESSION, SEPTEMBER 25-26-27, DETROIT

The 1946 Annual Session of the Michigan State Medical Society will be held at the Book-Cadillac Hotel, Detroit, September 22 to 27. Briefly, the daily schedule is as follows:

Sunday, September 22, 8:00 p.m.—House of Delegates.

Monday, September 23, 10:00 a.m. and 8:00 p.m.—House of Delegates.

Tuesday, September 24, 10:00 a.m. and 8:00 p.m.—House of Delegates.

Wednesday, September 25, Scientific Session—General Assemblies and meetings of the Otolaryngology, Dermatology and Syphilology, and Radiology Sections.

Thursday, September 26, Scientific Session—General Assemblies and meetings of the Ophthalmology, General Medicine, Surgery, and Anesthesia Sections.

Friday, September 27, Scientific Session—General Assemblies and meetings of the Pediatrics, Gynecology and Obstetrics, and Medicine Sections.

Officers' Night (a public meeting) will be held Wednesday, September 25, 8:30 p.m. State Society Night will be a social event of Thursday, September 26, with dancing for MSMS members and their ladies in the Grand Ballroom, Book-Cadillac Hotel, 10:00 p.m. to 1:00 a.m.

Members are urged to obtain their hotel reservations early—well in advance of September.

V. A. HOME-TOWN MEDICAL CARE A SUCCESS IN MICHIGAN

Over 500 cases per day are being processed by the Michigan Medical Service. Michigan's veterans are receiving excellent medical care from their home-town doctors—their family physicians, physicians of their own unlimited choice.

The medical director of the veterans facility at Dearborn, in his talk to the Wayne County Medical Society on May 6, urged the following simple rules:

1. Do not perform any services without authorization indicated on reporting form issued by Michigan Medical Service.

2. Do not charge veterans for unauthorized examination or treatment of a service-connected disability. (Space is provided on the reporting form for physicians to indicate additional services required.)

3. Process and return forms promptly. (Payment of pensions to veterans is withheld until all forms are completed.)

4. Whenever in doubt as to procedure or extent of treatment, call the Outpatient Department of the Veterans Administration, Buhl Building, Detroit, CHerry 4905.

5. The authorization blank includes and indicates a code number which agrees with a particular service listed in the Uniform Fee Schedule for Governmental Agencies; the physician is authorized to give this service as indicated by the code number, and no other service.

6. Send your bill to the Veterans Administration, Buhl Building, Detroit (not to Washington).

It is to be noted that authorization for service —in males—is given for only service-connected disabilities.

However, both service and non-service connected disabilities are eligible for medical treatment so far as *women veterans* are concerned.

For additional copies of the Uniform Fee Schedule for Governmental Agencies, contact Michigan Medical Service, 234 State St., Detroit 26, Michigan.

MSMS NEWSPAPER ADVERTISING CAMPAIGN PRESENTS FACTS

The MSMS newspaper advertising campaign, an experiment of 1946 and "Another First for Michigan," has been highly successful.

The Michigan State Medical Society placed, through the county and district medical societies, one advertisement, 8 by 10 inches in size, and defrayed the expenses of this advertisement. The advertisement was placed in as many papers in each county as the county medical society felt necessary for adequate coverage.

A series of eleven additional advertisements of the same size were prepared and proof sheets sent to county societies. Free mats of these advertisements were available from the Michigan State

(Continued on Page 842)

MSMS NEWSPAPER ADVERTISING CAMPAIGN PRESENTS FACTS

(Continued from Page 840)

Medical Society upon request of the publisher, with the approval of the county medical society. County societies were urged to place these eleven advertisements, or any individual ones it chose, in the newspapers of its selection. The expense of these was the responsibility of the county society, either directly or through local sources (such as pharmacists, chemists, individuals).

A total of eighty-seven newspapers is being utilized by the state and county medical societies in its 1946 newspaper advertising campaign of information and facts on the advantages to the people of the voluntary private practice of medicine.

BARUCH COMMITTEE ON PHYSICAL MEDICINE

The need for additional rehabilitation services and centers where the disabled and handicapped can receive post-hospital physical rehabilitation, psychosocial adjustment and vocational guidance and retraining is stressed in the final report of the subcommittee on civilian rehabilition centers issued recently by the Baruch Committee on Physical Medicine.

The report blueprints the organization and operation of model community rehabilitation centers. Emphasizing that such centers should integrate rather than duplicate the work of existing agencies, it outlines the organization and operation of proposed centers which would offer physical medicine (physical therapy, occupational therapy, physical rehabilitation), psychosocial adjustment, vocational guidance, social service, vocational education, special education for the handicapped, a sheltered workshop, brace and limb shop, research in rehabilitation, and an industrial program for the homebound.

The centers would not provide definitive medical treatment, but would bridge the gap between the bed and the job by following preventive and curative medicine and surgery with what the committee terms "the third phase of medical care."

The report suggests that the envisioned centers might be established by communities as "living war memorials" by the action of local governments, civic groups, social agencies, or medical schools and hospitals. They point out that both the construction and operating costs of such centers would be considerably less than for hospitals and would release needed hospital beds for sick patients.

Copies of the complete report are available from the Baruch Committee on Physical Medicine, Room 3500, 597 Madison Avenue, New York 22, New York.

U. S. PUBLIC HEALTH SERVICE

Announcement is made by Surgeon General Thomas Parran of the U. S. Public Health Service that a grant for the establishment of 125 fellowships to train physicians and sanitary engineers in public health has just been approved by the National Foundation for Infantile Paralysis.

Each fellowship provides a year's graduate training in a school of public health or a school of sanitary engineering. The fellowships will be administered by the Committee on Training of Public Health Personnel, which consists of representatives of schools of public health, the State and Territorial Health Officers, the American Public Health Association and the U. S. Public Health Service.

The fellowships are available either during the academic year beginning in the fall of 1946 or the fall of 1947, and are open to men and women, citizens of the United States under 45 years of age.

The purpose of the fellowships is to aid in the recruitment of trained health officers, directors of special medical services, and public health engineers to help fill some of the 900 vacancies in public health medical positions and 300 vacancies for public health engineers, existing in state and local health departments over the country. The fellowships are reserved for newcomers to the public health field, and are not open to employes in state and local health departments, for whom federal grants-in-aid are already available to the states.

Applicants for fellowships may secure further details by writing to the Surgeon General, U. S. Public Health Service, Attention: Public Health Training, 19th and Constitution Avenue N.W., Washington 25, D. C. Owing to the anticipated heavy enrollment in graduate schools, completed applications for training in the fall term of 1946 should be filed promptly. The awards committee will act on applications on the following dates: June 15, July 1, July 15 and August 1.

Is government providing more recruits to take over when medicine has become regimented?

$90,000 DONATION TO UNDERWRITE EXPANSION OF PSYCHIATRY PROGRAM

A grant of $90,000 to underwrite the expansion of the program in psychiatry in the Wayne University College of Medicine during a five-year period has been announced by University President David D. Henry.

The gift, which is to be available on July 1 with the opening of the new academic year in the college, has been made "by an interested but anonymous donor" who has indicated that, prior to the end of the five years, the program will be reviewed to determine whether or not the grant should be continued. "This grant is a splendid example," said Dr. Henry in announcing the gift, "of private philanthropy making it possible for the university to develop its program in most desirable directions that would be impossible under the restricted resources of the university's budget."

College of Medicine Dean Hardy A. Kemp hailed the subvention as a means to "preserving balance" in the training of doctors. Professional training in medicine, he indicated, could easily become overly mechanized in modern scientific society. "There is as much need today

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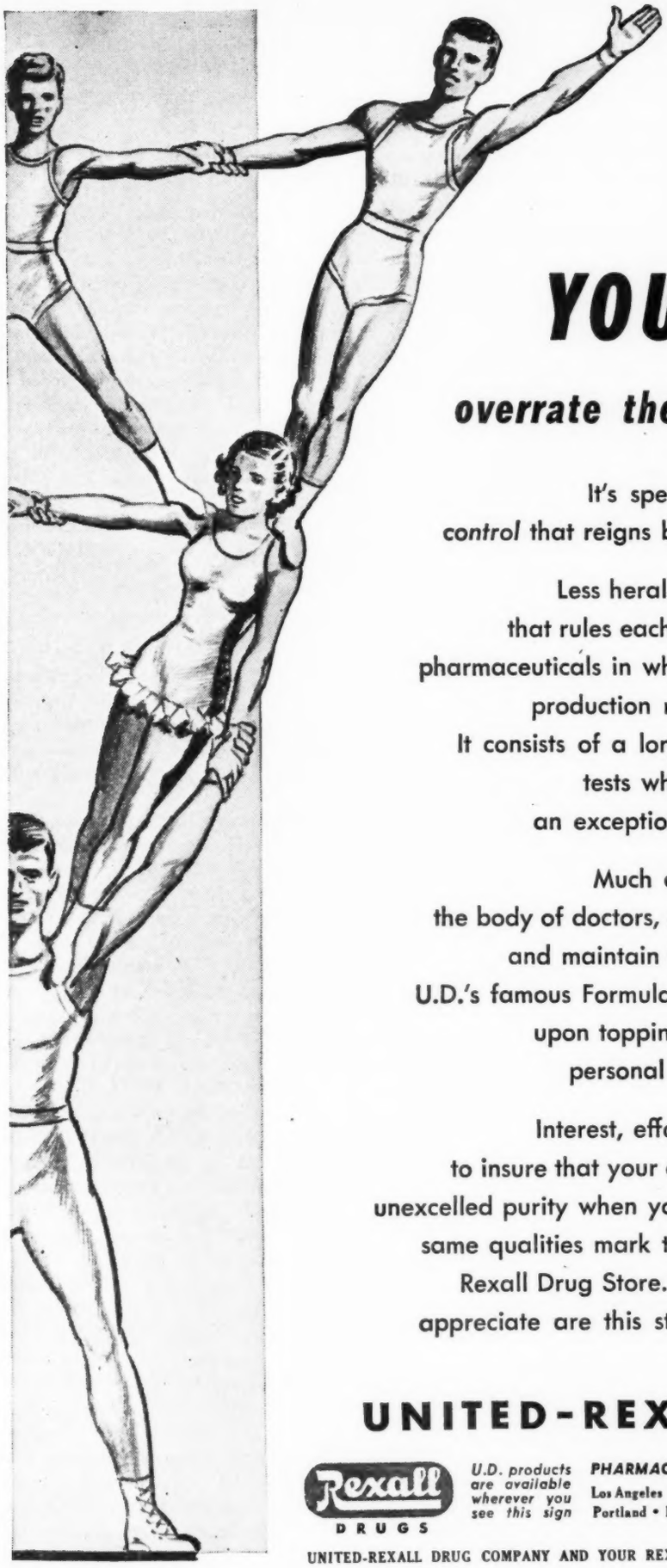


YOU CAN'T

overrate the value of CONTROL

It's spectacular, but brief—the kind of *control* that reigns beneath the big top each Spring.

Less heralded is the day-in day-out control that rules each operation in the manufacture of pharmaceuticals in white-walled U.D. laboratories and production rooms. For this is *quality control.* It consists of a long-established, efficient system of tests which have won for these products an exceptional record for consistent quality.

Much credit for these fine results is due the body of doctors, chemists and pharmacists who set and maintain the high standards. This group is U.D.'s famous Formula Control Committee which insists upon topping all previous precautions with a personal check of every finished formula.

Interest, effort, care and experience combine to insure that your orders are filled with materials of unexcelled purity when you specify U.D. preparations. The same qualities mark the service of your neighborhood Rexall Drug Store. Additional features that patients appreciate are this store's convenience and economy.

UNITED-REXALL DRUG CO.

Rexall DRUGS

U.D. products are available wherever you see this sign

PHARMACEUTICAL CHEMISTS FOR MORE THAN 43 YEARS

Los Angeles • Boston • St. Louis • Chicago • Atlanta • San Francisco
Portland • Pittsburgh • Ft. Worth • Nottingham • Toronto • So. Africa

UNITED-REXALL DRUG COMPANY AND YOUR REXALL DRUGGIST • *Your Partners in Health Service*

$90,000 DONATION TO UNDERWRITE EXPANSION OF PSYCHIATRY PROGRAM

(Continued from Page 842)

as there ever was for the physician, equipped though he be with every modern facility, to be sensitive to the mental states of his patients and appreciate their relationship to all-round health," Dean Kemp said. "The present, most welcome donation will allow psychiatry to take its rightful place among the major departments of our curriculum." Beyond this, the Dean declared, the expansion of the program will enable the University to broaden its services to the entire community.

The funds, which are to be provided annually under the grant, are to be administered through the Wayne University Foundation, non-profit corporation founded eight years ago to act as trustee for the receipt, management, and disbursement of grants and gifts to Wayne University. The money will be used to establish a full-time professorship in the Department of Psychiatry.

Dr. A. William Lescohier, president of Parke, Davis and Company and chairman of the Wayne University Foundation, acknowledged the Foundation's acceptance of the grant and said, "There is no field in medicine in which a substantial grant such as this could be made to greater advantage. The need for trained psychiatrists has been intensified by the stresses and strains experienced during the war. The quality of psychiatric service which is available now is high, but the number of psychiatrists is insufficient. The donor of this fund is to be congratulated on a highly significant contribution."

NEW MALARIA CURE

Discovery of new compounds in the field of chemotherapy that promise to prove beneficial in the prevention and cure of malaria was announced in a paper by Dr. Louis F. Fieser, Harvard University, read at ceremonies formally dedicating to scientists the Kresge-Hooker Scientific Library at Wayne University (Detroit) Saturday, May 11.

Based upon Dr. Samuel Cox Hooker's researches in "lapachol" a new organic chemical, Fieser's recent experiments have revealed that "hydrolapachol" possesses the power to destroy malaria parasites in the blood stream. Dr. Fieser stated that this is a new departure in the field of chemotherapy, for hydrolapachol belongs to a chemical type different from, and simpler than, all previously known chemotherapeutic agents. These known agents—quinine, atabrine, plasmoquin, the sulfa drugs, araphenamine, and even penicillin and streptomycin—all contain the element nitrogen and most of them are of complex molecular structure. Hydrolapachol is a simple, nitrogen-free substance, says Dr. Fieser, derived from certain woods. Drugs of the quinine-atabrine type effectively clear the blood of the malaria parasites that invade red blood cells and give rise to the characteristic symptoms of chills and fevers, but do not destroy "hidden" or "tissue" forms of parasites postulated as being responsible for recurrent relapses following periods of apparent freedom from the disease. Thus a prime objective of the extensive researches undertaken during the war was the discovery of compounds endowed with a curative action. What seemed to be needed, according to Dr. Fieser, was a chemotherapeutic agent of a type entirely different from the *vivax*-suppressive drugs, quinine and atabrine.

MISSISSIPPI VALLEY MEDICAL SOCIETY

The 11th annual meeting, Mississippi Valley Medical Society, will be held at the Hotel Jefferson, St. Louis, September 25-26-27. More than thirty clinical teachers from the leading medical schools will conduct this great postgraduate assembly whose entire program is planned to appeal to general practitioners. There will be more than sixty technical and scientific exhibits, noon-day round-table luncheons, and a big banquet, preceded by a social hour. Dr. Arthur H. Compton, Nobel Prize Laureate and Chancellor of Washington University, will be the principal banquet speaker, together with the presidents of the Illinois, Iowa and Missouri State Medical Societies. All ethical physicians are cordially invited to attend. A detailed program may be obtained from the Secretary, Harold Swanberg, M.D., 209-224 W.C.U. Bldg., Quincy, Ill.

NATIONAL HEALTH AGENCY BILL, H. S-2143

Senator Robert A. Taft, speaking for himself, and Republican Senators Joseph H. Ball and H. Alexander Smith, on May 3, introduced in the Senate a national health bill, based on new principles, to assure the extension of hospital and medical service throughout the United States.

The new bill proposes that all of the scattered health activities of the Federal Government be put together in a new independent National Health Agency to be headed by an outstanding physician. It is based on the extension of Federal aid to the States to enable them to give comprehensive hospital and medical service to every American unable to pay the full cost of such service.

Federal aid amounting to $200,000,000 a year for general medical and surgical service, and $20,000,000 a year for dental service is authorized by the bill, but with complete control of administration under State and local governments.

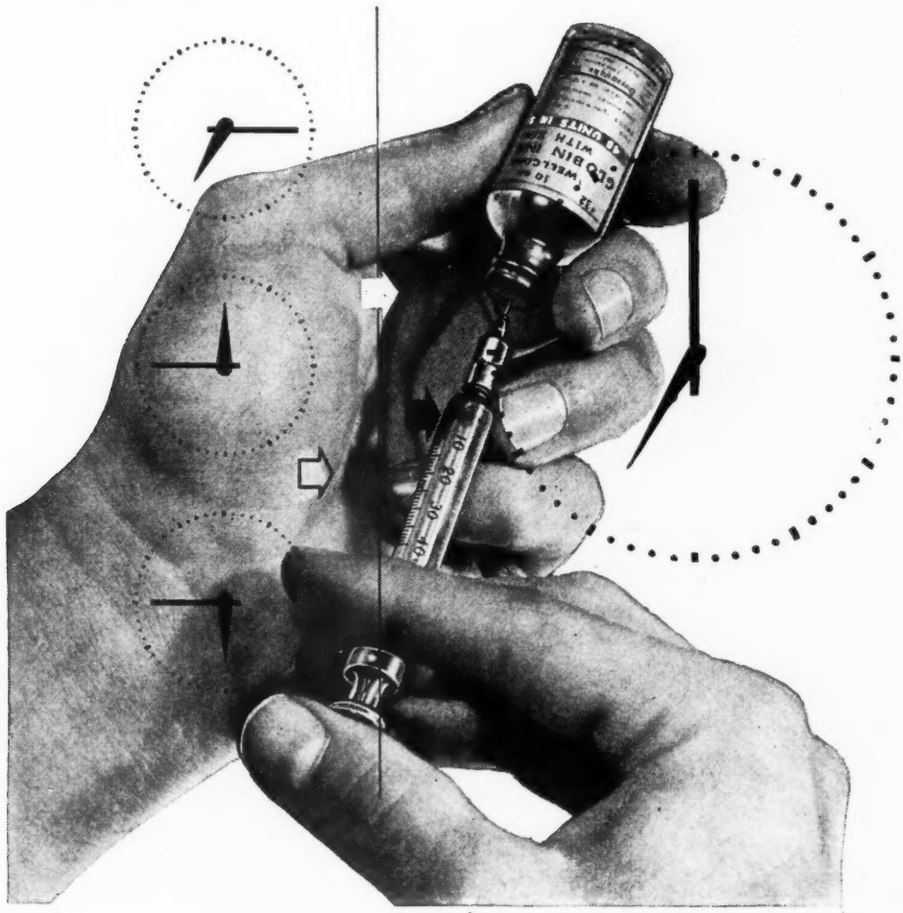
The new measure encourages the formation of voluntary health insurance funds, and also provides money for research, and grants-in-aid for research. The authors said that their bill is intended entirely to replace the Federal compulsory sickness insurance program proposed by Senators James E. Murray and Robert F. Wagner and Representative John D. Dingell.

The authors pointed out that, if possible, they would prefer to see the Health Agency a department of the government with a representative in the Cabinet, but that they felt this might create opposition to the vitally important job of consolidating health activities under an independent agency.

The bill proposes that as a condition of obtaining Federal aid, each State shall make a comprehensive survey of the health activities throughout the State, both public and private, urban and rural, with special reference to the medical care provided for the lower in-

(Continued on Page 846)

How to shift to 'WELLCOME' GLOBIN INSULIN from 3 injections to 1 a day...



A relatively simple procedure can make the unique advantages of intermediate-acting 'Wellcome' Globin Insulin with Zinc available to patients on regular insulin (crystalline or amorphous). Three steps can change the patient from two or more injections daily to one injection a day.

STEP 1 The initial daily dose of 'Wellcome' Globin Insulin with Zinc should be approximately 2/3 the total number of units of regular insulin previously given daily.

STEP 2 Adjust the carbohydrate distribution of the diet as required for the individual patient. This adjustment will be based on fractional urinalyses and blood sugar determination, if the latter are available.

STEP 3 Increase or otherwise adjust the daily dose of Globin Insulin as required. This adjustment is made in conjunction with step 2. Frequently, the final dosage of Globin Insulin will be not more than 4/5 the total units of regular insulin previously required daily.

Available in 40 and 80 units to the cc., vials of 10 cc. *'Wellcome' Trademark Registered.*

'WELLCOME' Globin Insulin WITH ZINC

BURROUGHS WELLCOME & CO. (U.S.A.) INC., 9 & 11 EAST 41ST STREET, NEW YORK 17, N.Y.

NATIONAL HEALTH AGENCY B.H. S-2143

(Continued from Page 844)

come groups. Based on this survey, the State must propose a plan by which hospital service and medical service in hospitals and clinics are made available to all families and individuals unable to pay for such services. In short, the plan must fill up the gaps which now exist in such sections. The hospital bill will promote the construction of rural hospitals, and this bill will add medical service.

The bill further provides that a State may use Federal money together with its own funds to encourage the formation of voluntary health insurance funds by paying to such funds the premiums required for those low income families and individuals unable to pay for insurance themselves. A State plan may thus provide medical care directly or through a fund such as the one which has been successfully operated in Michigan.

The encouragement of such voluntary funds will also make available, to those middle income families who desire it, insurance against serious illness, the expense of which they might find impossible to meet in a single year.

The bill also requires State plans to provide for the periodical medical examination and the periodical dental examination of all children in public and private, primary and secondary, schools. Lack of such examination led to neglect of many of the remedial defects which were responsible for the high rejection rate in the draft. This examination will be without charge, but free treatment will be given only to those whose families are unable to pay for it, or for insurance which might cover it. Federal funds may be used for some additional services at the option of the State.

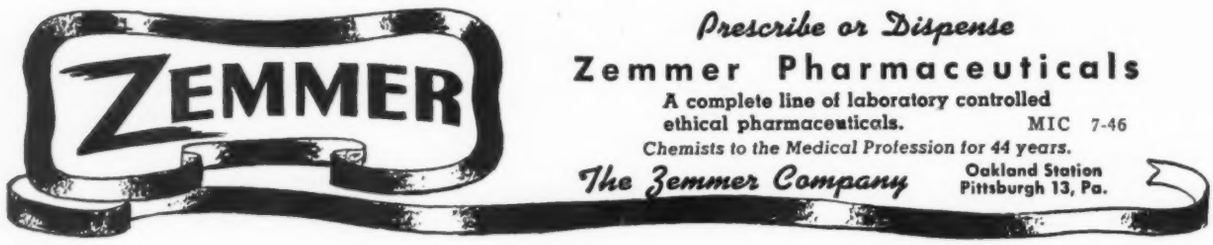
In addition, the bill provides further funds for research, particularly in the fields of dental health and neuropsychiatric problems. It authorizes buildings for such research.

Also, under the new proposal, any Federal employe who wishes to join a voluntary health insurance fund may direct the government to deduct the necessary sum from his pay and apply it directly to the fund. The government today is the only employer who will not accept such direction.

Speaking for himself and the co-sponsors of the bill, Senator Taft said: "Our proposal proceeds on a fundamentally different philosophy from that of the Murray-Wagner-Dingell Bill endorsed by President Truman (on which hearings are now taking place) and which proposes Federal compulsory sickness insurance. All classes of the population would have to pay for this insurance, in the form of payroll taxes or otherwise, so that a huge sum amounting to from three to five billion dollars a year would pour into Washington. The government would then have to set up a vast administrative organization with thousands of personnel to police the insurance system and to supervise and pay all the doctors in the United States. In effect, health service would be nationalized. A Federal bureau could tell everyone when he could have a doctor, how often the doctor could call, and whether the patient could have a specialist. Every detail of medical service would be regulated from Washington.

"The bill we are proposing proceeds on the theory that the United States already has a comprehensive medical service, as good as any in the world, but that there are gaps in that service, particularly in reaching the lower income groups. Our bill encourages and assists every State to fill up these gaps, building upon the existing foundation. Free service will be furnished to those unable to pay. Voluntary health insurance plans will be encouraged, so that health insurance may be available to the great numbers of those who desire it without forcing any one, patient or doctor, to abandon his present practices," the Senator said.

"Above all, the bill places the primary public responsibility for the health of the people on the States and on local governments. Medical care is primarily a local and State concern. We believe that Federal funds are necessary, but only to aid the lower income groups of the population and furnish financial assistance to States and local governments to supplement the limited funds available for help. We believe this plan is an American plan based on assistance to the needy, liberty to the individual, and a free medical profession. Only by retaining such freedom can we hope to go forward with the progress in medicine and health for which America has been distinguished," Senator Taft concluded.



# of research

—a handy reference work summarizing investigation into the complex steroid structure of Ertron and its action in the treatment of arthritis.

This book, prepared by the Medical and Chemical Research Departments of Nutrition Research Laboratories, brings the literature on the subject up to date, and describes the therapeutic and chemical uniqueness of Ertron—steroid complex, Whittier. A complete bibliography is included.

"Steroid Therapy in Arthritis" is now being mailed to the entire medical profession. Additional copies will be sent to any physician who desires them. Write to Medical Department, Nutrition Research Laboratories, 4210 Peterson Avenue, Chicago 30, Illinois.

NUTRITION RESEARCH LABORATORIES • CHICAGO

Little Joe Genius--Fact Detective

"Somep'n," said Little Joe Genius, "smells funny."

Now that was an odd thing to say because scarcely anybody has ever heard of an amusing odor. But what he meant was—that he smelled something peculiar he had smelled before, only he couldn't remember where he'd smelled it. You see, Little Genius was an experienced FACT hunter. When it came to sleuthing for BIG FACTS, Little Genius was the original Dick Tracy. He had a *nose* for Facts just as good reporters have a nose for news. And he smelled an important FACT, a BIG FACT but . . . but I'm getting ahead of my story.

Little Genius had been talking to his old friend, the family doctor, about a bill introduced in Congress . . . . named "The National Health Act of 1945." It seems that a Senator Wagner and a Senator Murray had introduced it in the U. S. Senate and Representative Dingell had introduced it in the U. S. House of Representatives. So everybody called the measure the Wagner-Murray-Dingell Bill.

Little Genius had said to the Doc, "By golly, I don't know the first thing about that Wagner-Murray-Dingell Bill."

"Little Genius," Doc had replied, "I think you had better study this Bill and then, when you figure it out, maybe you'll want to write your Congressman and tell him what you think about it. It's pretty important to *you.*"

"Did you read it?" I asked Little Genius.

"Did I read it?" he said, "I read it several times. I had to, because the first time I read it, the Bill reminded me of an English Fog that just closes around you and you can't find out what goes on. But I said to myself, 'Something in here reminds me of a BIG FACT': So I decided to find out what it was."

"Did you find the Big Fact?", I asked.

"I found it," said Little Joe Genius a trifle grimly. "I found the Big Fact in the Fog. That was what I smelled—The BIG FACT of the Wagner-Murray-Dingell Bill." He leaned forward and poked a finger at me.

"The Big Fact of the Wagner-Murray-Dingell Bill is that it is the same *political shenanigan* that the public has smelled so many times before. It's COMPULSION OF THE PEOPLE, pure and simple."

"Compulsion of the people isn't a very AMERICAN shenanigan, is it?", I asked.

"No," Little Genius replied, "it's more of a EUROPEAN shenanigan, for it makes the citizen become a CREATURE OF THE STATE. First it hypnotizes him with fancy promises of health for everybody and then binds him with the 'red tape' of security."

"This is like all the rest of those steps that lead to making the free citizen become the tamed slave of the State," explained Little Genius. *"First it takes over your health, then your wealth and then you get wise—when it's too late.* It's slow and easy but just try getting that freedom back once it's lost."

"If what you say is true I'm against this shenanigan," I said. "But I want health insurance in case I get real sick or if I have to go to the hospital. I can't afford to be without it."

"Your right," said Little Genius, "and I'm covered with the newest and best health insurance in the world. You can get it, too. It's Michigan Medical Service and Michigan Hospital Service. These are Blue Cross *voluntary* non-profit plans that supply complete protection for you and your whole family for only a few cents a day. Because these are *non-profit* plans, overhead administrative costs are small and *over 87% of the money taken in is paid out for the people's medical and hospital care*—$12,320,522 in 1945 in Michigan alone. The overhead administrative cost on the *compulsory* government plan is much higher, it . . ."

"Say, by the way," I interrupted, "what would this Wagner-Murray-Dingell Bill actually compel me to do?"

"I could read you the actual words," said Little Genius, "but let me sum them up:

1. All the people who work for wages or salaries *must* join.

2. All the people *must* pay 3% of their salaries on the first $3,600 earned; that's *taken* out of their pay check. (The total yearly cost is estimated at over Four Billion Dollars.)

(Continued on Page 860)

Editorial Comment

1946 YEAR OF DECISION

How Do They Do It? The question, "How does the medical profession develop the spirit of '46 in the State of Michigan?" is readily answered by brief reference to reports appearing in the March, 1946, issue of the JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY. As has been pointed out before in the *Pennsylvania Medical Journal,* the medical profession in Michigan is particularly well unified and through the "war years" has regularly paid each year, in addition to its annual dues of $12, an extra assessment ranging from $10 to $25, thereby providing the funds for the advancement through several service channels of greatly improved public appreciation of the purposes and objectives of the society.

Michigan's Postgraduate Medical Education Fund at the end of the year 1945 showed a balance of $23,400; the balance in the Public Education Fund was $12,150. Their budget for the purposes of the latter fund in 1946 is $31,000 and the extra assessment per member in support thereof is $10.

As the result of initial and continuously loyal membership support, the Michigan State Medical Society pioneered to establish Michigan Medical Service which, in the year 1945, disbursed a total of $4,149,000, and since its inception, a total of $13,634,000, representing approximately 88 per cent of the income for the provision of voluntary insured services to subscribers. Administration costs approximated 11 per cent.

Michigan Medical Service, similar to our Medical Service Association of Pennsylvania (MSAP), recently signed a contract with the Veterans Administration to act as fiscal agent between the government and Michigan doctors who desire to render medical care to veterans. The Michigan State Medical Society was ready for this important assumption of a government contract because it had previously developed "a uniform fee schedule for all governmental agencies, thereby establishing a minimal intrinsic value of medical service."

The Michigan State Medical Society (4,686 members, 1,245 having been in military service) recently created the Michigan Foundation for Medical and Health Education. In September, 1945, this foundation, in need of funds, asked for pledges and payments to assure its activities for the following twelve months. At the end of the fifth month $48,000 had been pledged or paid. Of this total sum, 30 physicians living in 14 different Michigan towns gave $34,000, and Michigan Medical Service gave $10,000.

So far as the medical profession of Michigan is concerned, is not the answer to the question "How do they so admirably meet the spirit of '46?" to be found in the profession's remarkable demonstration of individualized loyalty in support of practical and effective public relations planned by the representatives of the organized profession who co-operate with state and local governments and the public?—*Pennsylvania Medical Journal,* May, 1946.

DINGELL BILL, A "FORGOTTEN CAUSE"

Although public health insurance has been the subject of bitter controversy among medical groups and in Congress, the public's opinion as to how the program should be carried out has not crystallized very definitely as yet.

The great majority of people, a poll shows, think the idea of having insurance to take care of doctor, dental, and hospital bills is a good one. But the public does not seem to have made up its mind as to how to pay for such a plan.

The general public has not yet become familiar with the Wagner-Murray-Dingell medical insurance bill. Fewer than four in every ten persons polled had heard or read about it.

Opinion is almost evenly divided on whether people would get better medical care than they are now getting if the government took over the job of administering a health insurance program.

One indication of the generally uncrystallized public opinion can be seen from replies to the question:

"What do you think should be done, if anything, to provide for the payment of doctor, dental, and hospital bills for people in this country?"

The replies show a wide variety of ideas. A total of 17 per cent suggest voluntary health insurance programs, such as the Blue Cross hospitalization plan; another group, comprising 12 per cent, proposed medical insurance under Social Security; a third group of about equal size (11 per cent) suggest special grants for hospitals and clinics to care for the needy. Another group of 6 per cent propose private or community charity, and 12 per cent give miscellaneous suggestions. Of the remainder, 16 per cent say they don't know what

(Continued on Page 854)

DINGELL BILL, A "FORGOTTEN CAUSE"

(Continued from Page 852)

should be done, and 26 per cent do not think anything should be done.

Other questions put to voters in the poll follow:

"Just making a guess, about how much did you pay for doctor, hospital and dental bills during the past year?"

Nothing	16%
Under $25	21
$25 to $50	16
$50-$100	16
Over $100	28
Don't know	3
Median average	$50

"How much would you be willing to pay a year for you and your dependents to join a health insurance plan which would pay all doctor, hospital and dental bills?"

Nothing	9%
Under $25	30
$25 to $50	23
$50-$100	15
Over $100	4
Don't know	19
Median average	$30

"If the government handled a health insurance program, do you think you would get better medical care or not as good medical care as you are now getting?"

Better	32%
Same	23
Not as good	35
No opinion	10

—GEORGE GALLUP in *The Washington Post,* May 19, 1946.

The Wagner-Murray-Dingell proposals would establish a political appointee, the Federal Security Administrator, as dictator in all matters relating to health. Working under him the Surgeon General of the Public Health Service would be authorized and instructed to:

1. Hire doctors, specialists, dentists, nurses, laboratory technicians, and establish rates of pay.

2. Establish fee schedules for physicians' and dentists' services.

3. Fix the qualifications for specialists.

4. Determine the number of individuals for whom any doctor or dentist may provide service.

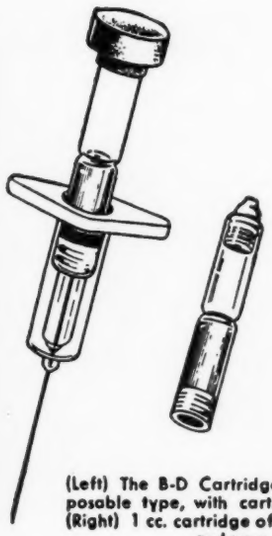
5. Determine what hospitals or clinics may provide service for patients and under what conditions.

6. Provide for all wage earners and their dependents and for all self-employed persons and their dependents—doctor, dentist, home nursing, and laboratory care and hospitalization.

It is estimated that the cost would be more than four billion dollars annually. One man—the Surgeon General—would direct the spending of this stupendous sum. Based on experience in other countries, it would take at least 300,000 lay bureaucrats to administer this system of politically distributed medical care.

Doctors know that an easier method must be provided for paying the costs of unusual or prolonged illness. That is why so many prepayment plans and insurance programs are being developed. Given reasonable time for expansion, these plans and programs will bring adequate relief.—STEGEN in the *Journal Tennessee State Medical Society,* May, 1946.

Announcing
Easier Administration of Penicillin in Oil and Wax



(Left) The B-D Cartridge Syringe, disposable type, with cartridge inserted. (Right) 1 cc. cartridge of penicillin in oil and wax.

The B-D Metal Cartridge Syringe with cartridge inserted.

Bristol Laboratories now introduce two techniques which are designed to make the administration of penicillin easier and more practical. Both of them make use of a 1 cc. glass cartridge of Penicillin in Oil and Wax. A completely new feature of the Bristol Cartridge is a specially designed rubber stopper which permits an aspirating test to prevent venoclysis.

Bristol Cartridges may be used anywhere, any time with the B-D Cartridge Syringe, Disposable Type. (Above) For office or hospital, many physicians will prefer the B-D Metal Cartridge Syringe. (Left)

In addition to the 1 cc. cartridges, Bristol Penicillin in Oil and Wax is still available in 10 cc. rubber-stoppered vials, for those who prefer to employ a Luer-lock syringe. All forms are available through your regular source of supply.

PENICILLIN IN OIL AND WAX BRISTOL

(Romansky Formula)

BRISTOL LABORATORIES INCORPORATED — SYRACUSE 1, NEW YORK

Have You Made Your Hotel Reservation?

DETROIT SESSION

Michigan State Medical Society

September 25-26-27, 1946

The list of hotels and the reservation blank below are for your convenience in making your hotel reservation in Detroit. Please send your application not to the Hotel directly but to E. C. Texter, M.D., Chairman of MSMS Housing Committee, 1005 Stroh Bldg., Detroit 26. Mailing your application now will be of material assistance in securing hotel accommodations.

HOTELS AND RESERVATIONS PRICES

HOTEL	SINGLE	DOUBLE BED	TWIN BEDS
Book Cadillac Hotel	$3.50 to $7.00	$5.00 to $9.00	$6.00 to $9.00
Statler	3.00 to $6.50	5.00 to $8.00	5.50 to $9.00
Detroit Leland	3.00 to $5.00	5.00 to $7.00	5.00 to $7.00
Fort Shelby	2.50 to $5.00	4.00 to $7.00	5.00 to $7.00
Tuller	2.50 to $4.00	4.00 to $5.00	5.00 to $7.00
Barlum	2.50 to $4.00	4.00 to $5.50	5.50 to $6.00
Wolverine	2.50 to $4.00	3.50 to $5.00	5.00 to $8.00

Very Few Singles Are Available

E. C. Texter, M.D., Chairman
MSMS Housing Committee
1005 Stroh Building
Detroit 26, Michigan

Please make hotel reservation(s) as indicated below:

Hotel .....(1st choice)
Hotel .....(2nd choice)
Hotel .....(3rd choice)

.....Single Room(s)
.....Double Room(s) for.....persons
.....Twin Bedded Room(s) for.....persons

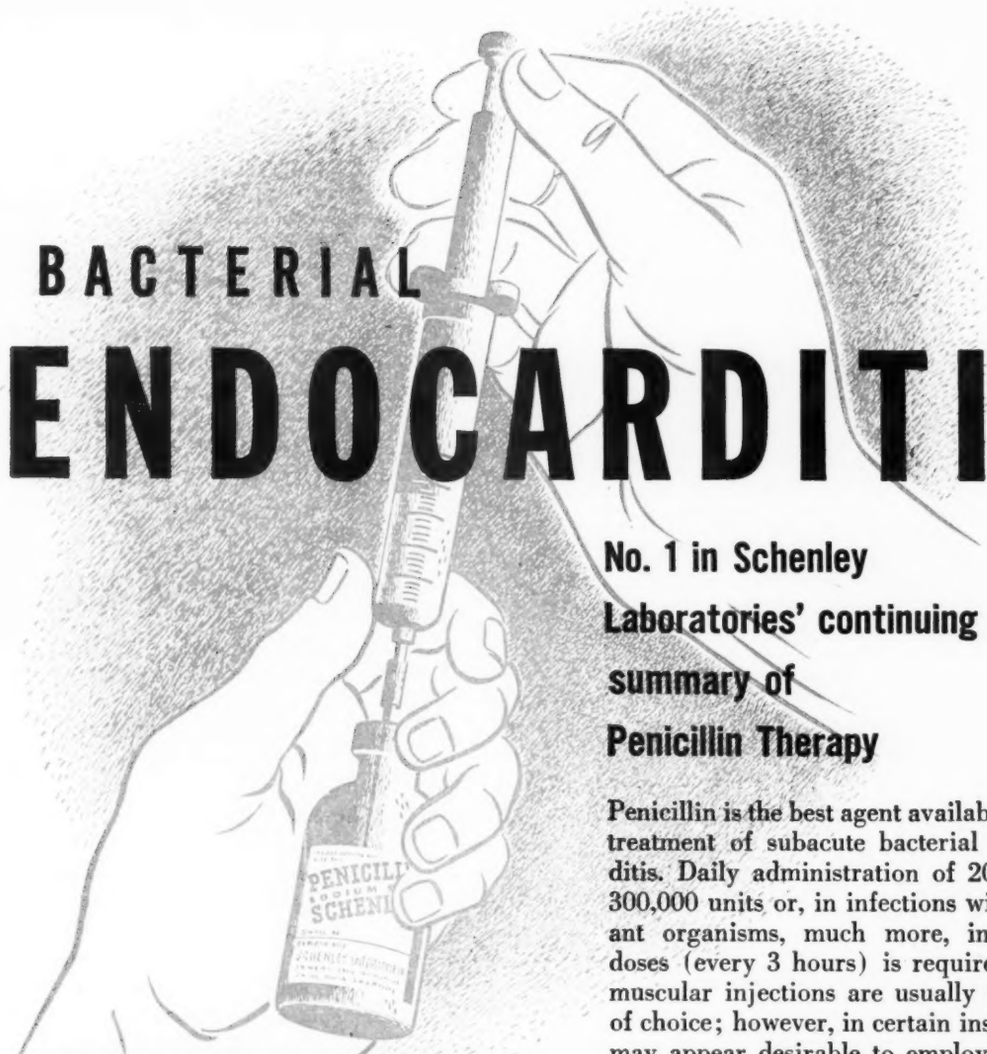
Arriving September.....hour.....A.M. .....P.M.
Leaving September.....hour.....A.M. .....P.M.

(Names and addresses of all applicants including person making reservation).

Name	Address	City	State

Date..... Signature .....

Address..... City.....



BACTERIAL ENDOCARDITIS

No. 1 in Schenley Laboratories' continuing summary of Penicillin Therapy

Penicillin is the best agent available for the treatment of subacute bacterial endocarditis. Daily administration of 200,000 to 300,000 units or, in infections with resistant organisms, much more, in divided doses (every 3 hours) is required. Intramuscular injections are usually the route of choice; however, in certain instances, it may appear desirable to employ continuous drip. Therapy should be continued for a minimum of 3 weeks and must be continued until the blood cultures are consistently negative. Penicillin alone is as effective as penicillin and heparin combined.

Final determination of cure depends upon long-term observation, but if the patient remains asymptomatic and bacteriologically free for a period of 4 weeks after cessation of penicillin therapy, the prognosis for complete cure is excellent. However, it must be remembered that valvular damage and renal lesions are not favorably influenced.

DAWSON, M. H., AND HUNTER, T. H.: *The Treatment of Subacute Bacterial Endocarditis with Penicillin: Results in Twenty Cases, J.A.M.A. 127:129 (Jan. 20) 1945*... FAVOUR, C. B.; JANEWAY, C. A.; GIBSON, J. G., II, AND LEVINE, S. A.: *Progress in the Treatment of Subacute Bacterial Endocarditis, New England J. Med. 234:71 (Jan. 17) 1946.*

BEFORE YOU DECIDE ON THE PENICILLIN OF YOUR CHOICE

For many years, Schenley has been among the world's largest users of research on mycology and fermentation processes. In addition, Schenley Laboratories manufactures a complete line of superior penicillin products—products thoroughly tested for potency and quality. These two important facts mean you may give your patients the full benefits of complete penicillin therapy.

SCHENLEY PENICILLIN PRODUCTS

Penicillin Ophthalmic Ointment Schenley
Penicillin Troches Schenley
Penicillin Tablets Schenley
Penicillin Ointment Schenley
Penicillin Schenley

SCHENLEY LABORATORIES, INC. Executive Offices: 350 Fifth Avenue, N. Y. C.

War Medicine

SURPLUS ARMY HOSPITALS RELEASED TO VETERANS ADMINISTRATION

The Army's great general hospitals, built to the latest medical and surgical standards for the care and treatment of its wounded and sick during the war, are being released as rapidly as the decrease in the patient load justifies and offered first to the Veterans Administration for its rapidly expanding program for medical care for veterans.

The transfers have been made as part of the Army's comprehensive plan, devised before hostilities had ceased, to effect a smooth transition when responsibilities for the care of the sick and wounded were transferred from the Army to the Veterans Administration.

The War Department program is being carried out through close co-operation between Major General Norman T. Kirk, The Surgeon General, and Dr. Paul R. Hawley, Medical Director of the Veterans Administration, who before retirement from the Army as a Major General, was Chief Surgeon, European Theater of Operations.

"Of 25 hospitals we have earmarked for Veterans Administration at their request 11 have been transferred complete to the last scalpel," General Kirk announced. These 11 hospitals comprised 24,000 beds while the Medical Department was operating them. Because of a lack of sufficient personnel, the Veterans Administration at present is operating these hospitals at less than the above maximum capacity.

When three general hospitals housing paraplegic centers, McGuire at Richmond, Virginia; Birmingham at Van Nuys, California; and Vaughan at Hines, Illinois, were released to the Veterans Administration on April 1, 1946, special equipment for the treatment of the paraplegic patients remained in the hospitals in addition to the standard equipment turned over in all cases to the Veterans Administration. A part of this special equipment included wheel chairs, walking apparatus, special headphones for built-in radios and shop facilities used in training the patients who are paralyzed in the lower half of their bodies.

The treatment of the 700 patients in these centers continued uninterrupted despite the transfer of the hospital from Army to Veterans Administration. The patients received certificates of disability discharges from the Army and immediately became patients of the Veterans Administration without leaving their beds.

In addition to giving the Veterans Administration priority on any surplus Army hospital installations, the War Department plan also includes placing Medical Corps physicians, surgeons, nurses, technicians, orderlies and dietitians on temporary duty in Veterans Administration hospitals so that the care of the wounded may continue uninterrupted. Continuing, also, treatment to men considered enough improved to warrant their discharge from the Army, hospital staffs have remained on duty until relieved by Veterans Administration personnel, to care for these veteran-patients who received their discharge upon the transfer of the hospital.

General Kirk in January, 1946, instructed commanding officers of hospitals to replace military personnel other than doctors and surgeons with civilian workers whenever possible. Thus, these civilians could transfer to Veterans Administration employ and insure smooth operation and care of patients when the hospital changed hands.

The Veterans Administration has also been authorized to place employes in Army hospitals to observe specialized professional techniques practiced by the Medical Department staffs.

More than 5,000 veterans have received treatment and care in Army hospitals after they received their discharge. At present, approximately 2,030 veterans are receiving treatment under these conditions. This care will continue until the expanding medical program of the Veterans Administration is able to accommodate these patients.

In addition to providing care and treatment for veterans, the Army is also retaining the responsibility for the care of more than 3,000 tuberculosis patients. Normally, these men would have been discharged and released to Veterans Administration control. However, since the facilities for their best care are not available in Veterans Administration hospitals at present, the Army will continue its treatment of these patients until the Veterans Administration acquires the personnel necessary to bring the treatment level to that of both the Medical Department and the Veterans Administration.

Army hospitals also stand ready with outpatient treatment for veterans with service-connected disability in isolated areas or emergency cases where civilian hospital facilities are not immediately available. Outpatient treatment for veterans is also practiced in Puerto Rico, Alaska, and the Philippine Islands.

Several Army hospitals were erected by the Army with an eye toward future occupancy by the Veterans Administration. Both Vaughan and McGuire General Hospitals, housing paraplegic centers, were constructed with this in mind. In fact, Vaughan General Hospital was erected upon Veterans Administration property. Although the wards and buildings were built according to Army specifications, they can be changed in minor aspects to fit Veterans Administration needs. Kitchens, mess halls and clinic rooms are a few of the features that vary.

The eleven General Hospitals which already have been released to the Veterans Administration with all equipment are: Ashburn, McKinney, Texas; Foster, Jackson, Mississippi; La Garde, New Orleans, Louisiana; Thayer, Nashville, Tennessee; Winter, Topeka, Kansas; Birmingham, Van Nuys, California; Finney, Thomasville, Georgia; McCloskey, Temple, Texas; McGuire, Richmond, Virginia; Nichols, Louisville, Kentucky; and Vaughan, Hines, Illinois.

(Continued on Page 860)

YOUR GROWING PRACTICE

needs this

X-ray Diagnostic Unit

KELEKET KXP-100
DIAGNOSTIC UNIT

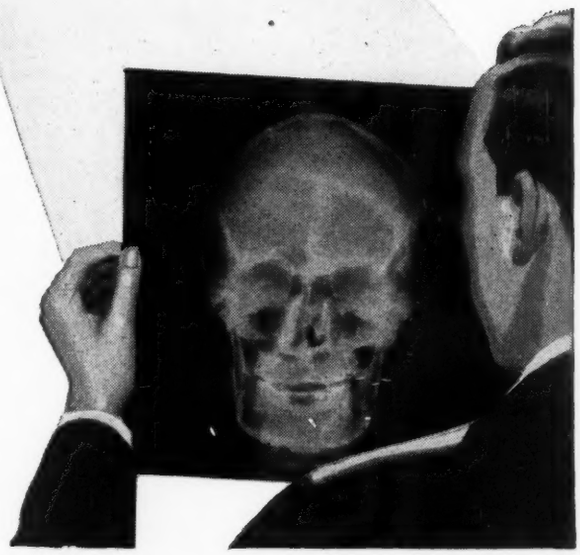
YOU physicians who have longed for the convenience of X-ray equipment right in your own office will find everything desired in this KELEKET KXP-100 Diagnostic Unit!

It has sufficient power to take care of all radiographic and fluoroscopic requirements in the vertical, horizontal, and Trendelenburg positions. It is extremely easy to operate, because of the famous Multicron control with the KELEKET fixed milliamperage feature. A space only 8 x 10 ½ feet is adequate for the complete installation . . . and the total cost is surprisingly low!

Imagine how valuable this KELEKET Diagnostic Unit will be in your practice. You'll obtain brilliant films of fine diagnostic quality, even of the skull, abdomen and other heavy parts of the body. You'll be able to confirm your clinical diagnoses quickly, *right in your own office.*

America today is more "X-ray conscious" than ever before. Investigate this KELEKET KXP-100 Diagnostic Unit now.

Call or write us direct



THE EVANS-SHERRATT COMPANY

Columbia 2310-2311

1238 Maccabees Building **Detroit 2, Michigan**

(Continued from Page 858)

ARMY AND NAVY ACT JOINTLY TO RELIEVE MEDICAL AND DENTAL OFFICER SHORTAGE

The War and Navy Departments announced joint action taken to relieve a very serious shortage of medical and dental officers which now exists in the combined requirements of the Army, Navy and Veterans Administration.

Regardless of date of entry on active duty, only a two-year period of service after July 1 will be required of all Army Medical Corps Officers including graduates of the Army Specialized Training Program except critically needed specialists. A two-year period of service will be required for all Navy graduates of the Navy Medical V-12 Training Program, who after March 1, 1946, were or will be ordered to active commissioned duty upon completion of internship. Navy doctors already separated will not be recalled. Under the Army's new two-year policy, it is estimated that approximately sixty days after July 1 will be required to complete the release of approximately 3,000 Army doctors affected by the change.

By the above action the requirements both of the Army and Navy can be met and in addition the Army can make available to the Veterans Administration approximately 1,000 badly needed medical officers and the Navy about 500.

In order to meet the minimum requirements of the Army and Navy for dentists, and to establish comparable discharge criteria for both services, the War and Navy Departments have agreed that all dental officers partially or wholly assisted in their education by the Federal Government in the ASTP and V-12 programs and now on active duty upon completion of such education, will for the time being be released upon completion of three years of commissioned active duty service. Navy dentists already separated will not be recalled to active duty. The length of service required for Army dentists now on duty other than ASTP graduates has been reduced from 39 to 36 months effective immediately.

The Navy will shortly make available to the Army approximately 800 dental officers. When this transfer is completed, the period of service required of all dental officers will be further reduced. Before discharge requirements can be reduced to two years for both services, the Army will require additional dental officers. To meet this need, Selective Service has been asked to procure 1,500 young dentists, who are being accepted with the understanding that no more than two years of service will be required from them.

Transfers of dental officers from the Army or Navy to the Veterans Administration will not be required.

It should be noted that extension of the period of service required for Navy doctors and dentists applies only to those whose education was subsidized by the Federal Government in the V-12 or the ASTP programs.

LITTLE JOE GENIUS—FACT DETECTIVE

(Continued from Page 850)

3. A new Government Bureau, will be set up to *dictate* what doctors *are allowed* to doctor you under this plan.

4. This same Bureau *dictates how much* the Doc is allowed to charge.

5. This Government Bureau *approves* or *disapproves* the doctor's prescriptions.

6. A government official will *decide* whether you will be *allowed* to consult a specialist when you are sick.

7. This official will *tell you* what specialist you *are allowed* to see.

8. This Bill directly or indirectly puts *all* the doctors and nurses under the *control* of a government *appointed* man, who doesn't even have to be a doctor."

"That's *compulsion,*" fumed Little Genius indignantly, "that's *government-operated medicine,* that's *dictatorship* and that's the *'rat'* I smelled."

"It's Political Medicine!", I said. "It reminds me of a saying I heard:

> "May Government of the people,
> By the Bureaucrats,
> For the Politicians,
> Not cause the liberty of a free people
> To perish from the earth."

"Amen," said Little Genius, "but 'sayings' aren't enough. We've gotta *stop* this Bill and I'm going to write my Congressman right now. *Doc doesn't have to worry* if this Bill becomes law—he'll be practicing medicine from 9:00 a.m. to 5:00 p.m. on a salary. But ME, I'm going to be *paying* the *BILL* and getting less service. I'm going to be the *Four Billion Dollar fall guy* that pays *more* and gets *less. I'm* the sucker on this deal. I don't like it and I'm going to tell my Congressman so."

"Me, too," I agreed. "Hand me that letter paper!" So two strong letters of protest against the Wagner-Murray-Dingell Bill went to Washington, D. C.

Follow the example of Little Joe Genius. Write your Congressman in Washington, D. C.

This article, in pamphlet form, is being distributed to the laity by members of the MSMS and the Auxiliary. It is the second in a series to be presented in THE JOURNAL. Little Joe Genius will talk about the progressive health program of the doctors of medicine in the next issue.

Special Notice to Members

This Disability UPG20 Program shown on the opposite page, extended to the Michigan State Professional Groups is a program that provides protection which gives Lifetime Benefits and is not subject to cancellation on account of age leaving you without protection when your loss of time is most valuable. It pays benefits for one day or more and covers permanent total disability. This UPG20 Program pays for every injury or accident, even Commercial Air Line travel is fully covered. It covers all sickness and every disease except insanity and venereal diseases. The maximum benefits are $600.00 monthly and its minimum benefits are $200.00 monthly for any illness. Accident benefits pay double indemnity for travel accidents on a common carrier, excepting air travel, which pays only the regular indemnity benefits.

To broaden the benefits while this UPG20 Program is in operation, the following limitations, common to most policies, have been omitted and are not a part of these policies.

(1) The Company's right to cancel the policy at any time—(Standard Provision No. 16).

(2) The Company's right to terminate the policy at a certain age (Standard Provision No. 20).

(3) The Company's right to refuse renewal of policy to any individual practicing member of your group is forfeited except for non-payment of premium on or before due date.

(4) The Company's power to impose a Rider, eliminating the benefit for something that may happen or develop to render you an undesirable or un-insurable risk, is canceled thru the elimination of each of the above.

The Michigan enrollment is proceeding most satisfactorily, but it is the desire of the Companies, not only to conduct the enrollment in the manner found to be most successful for completing the group, but with full consideration for the policy and practice of the Michigan Professional Associations mentioned.

Most Professional Groups, Associations, or Societies find it inexpedient to make specific endorsement of any company or plan to its members. It is the practice of the Mutual Benefit Health and Accident Association and the United Benefit Life Insurance Company both of Omaha, to submit their Disability Plan to the individual members of the group for their personal consideration. This has proven to be the most successful way to complete the enrollment of members of these groups since it brings about a decidedly better understanding of the plan to the members and, thereby, increases the ultimate total enrollment.

Therefore, should any Authorized Registrar, or Mutual Benefit Salesman represent that he is from either of the designated Associations, or that this plan has been endorsed by either Association, will you kindly report same together with the name of the representative to State Manager, Professional Group Department, Room 1142, Book Bldg., Detroit, Michigan.

Mutual Benefit Health and Accident Association, Omaha

Three drops of PRIVINE... and welcome relief!

Hay fever sufferers are finding prolonged symptomatic relief with minimal dosage—only three drops—of Privine, Ciba's potent vasoconstrictor.

Privine Hydrochloride acts quickly on the nasal mucosa without retarding ciliary activity. The solution is buffered to a pH of 6.2, closely simulating normal nasal secretions.

Physicians will find that by advising their patients to use no more than the recommended three drops in each nostril, no oftener than three times daily, gratifying and prolonged relief will be experienced.

PRIVINE is available in two solutions, 0.1 per cent and 0.05 per cent, packaged in 1-ounce bottle with dropper designed to dispense but three drops —the recommended dose. Also available in bottles of 16 fluid ounces.

PRIVINE NASAL JELLY—Tubes of ⅝ oz., containing 0.05% Privine Hydrochloride.

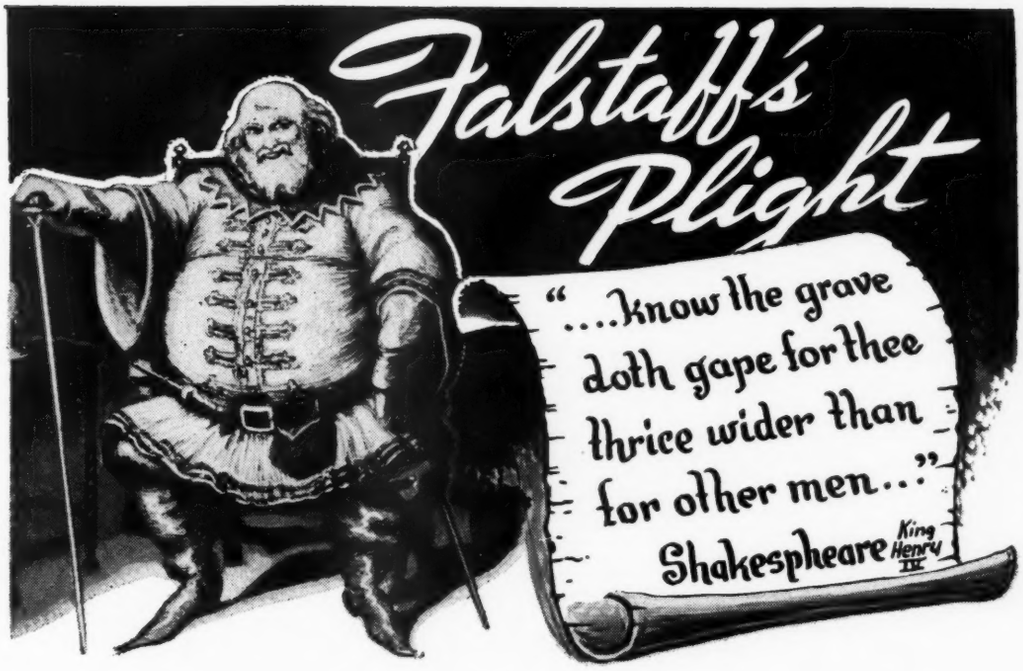
Privine — *Trade Mark Registered in U. S. Pat. Off.*
Brand of Naphazolene Hydrochloride

CIBA

Privine is Council Accepted.

CIBA PHARMACEUTICAL PRODUCTS, INC., SUMMIT, NEW JERSEY

In Canada: Ciba Company Limited, Montreal



Was Falstaff a hypothyroid case? We cannot say for certain, but we do know that excessive weight is as much of a threat to life today as it was in Falstaff's time.

To guard against the dangers of hypothyroid obesity, the modern physician employs THYROBROM, a ***brominated*** thyroid preparation with clinically proved advantages over plain thyroid.

THYROBROM provides every physiological effect of thyroid U.S.P., but minimizes the thyrotoxic manifestations of plain thyroid.

In a controlled clinical series[1] of 60 obese cases receiving daily doses of thyroid U.S.P., 31 patients reported palpitation and nervousness. ***When THYROBROM was employed in an identical manner in the same group, only 11 patients reported such symptoms.*** Moreover, THYROBROM was over 35% more effective than thyroid U.S.P. in the average weight reductions achieved.

Each THYROBROM tablet contains ***brominated*** thyroid 2 gr., made from the finest grade of clean, fat-free, desiccated whole thyroid. THYROBROM'S iodine content, 0.2%, equals the U.S.P. standard for thyroid.

THYROBROM may be prescribed in hypothyroid obesity or in any indication for thyroid U.S.P. It may be tried in cases in which thyroid U.S.P. is not well tolerated.

ADMINISTRATION: ***Adults***—½ to 1 tablet (1 to 2 gr.) daily, preferably given in the morning. Dosage may be gradually increased to meet individual requirements, but should seldom exceed 4 gr. per day. Discontinue if untoward symptoms arise. Therapy should be controlled by periodic examinations. Any thyroid preparation is contraindicated in cardiac disease, adrenal cortex insufficiency, hypertension, diabetes and hypothyroidism secondary to pituitary dysfunctions.

HOW SUPPLIED: Bottles of 30 tablets, grooved for easy division.

Write for literature.

[1]*M. Rec.*, 158:420, 1945.

Thyrobrom

VAN PATTEN PHARMACEUTICAL CO. 500 NORTH DEARBORN, CHICAGO, ILL.

ALL THE NUTRIENTS

Essential for a Food Supplement

Whenever the intake of essential nutrients must be augmented, as in convalescence from surgery or infectious disease, or in the correction of malnutrition, the delicious food drink which results from mixing Ovaltine with milk can be of significant value. This palatable food supplement provides a wealth of essential nutrients in a pleasant, easily assimilated form. It supplies protein of high biologic value, readily metabolized carbohydrate, easily emulsified fat, ascorbic acid, B complex and other vitamins, as well as essential minerals. Three glassfuls daily sharply augments the intake of these nutrients, as shown by the table of composition. Its low curd tension makes for rapid gastric emptying, hence appetite for the next meal is not interfered with. This delicious food drink is enjoyed both as a mealtime beverage and between meals.

THE WANDER COMPANY, 360 N. MICHIGAN AVE., CHICAGO 1, ILL.

Ovaltine

. ee servings daily of Ovaltine, each made of
½ oz. of Ovaltine and 8 oz. of whole milk,* provide:

CALORIES	669	VITAMIN A	3000 I.U.
PROTEIN	4.1 Gm.	VITAMIN B_1	1.16 mg.
FAT	35 Gm.	RIBOFLAVIN	1.50 mg.
CARBOHYDRATE	64.8 Gm.	NIACIN	6.81 mg.
CALCIUM	1.12 Gm.	VITAMIN C	39.6 mg.
PHOSPHORUS	0.939 Gm.	VITAMIN D	417 I.U.
IRON	12.0 mg.	COPPER	0.50 mg.

*Based on average reported values for milk.

The Common Denominator of Reducing Diets

Whether weight reduction is to be brought about gradually, at the rate of a pound or two per week, or drastically at the rate of a pound per day, all reducing diets must recognize one cardinal requirement: the need for protein of the right quality in the right amount.

Unless biologically adequate protein is supplied in the quantity normally required, the living tissue itself would suffer; tissue repair could not be carried on; hemoglobin regeneration would be impaired; antibody formation would be curtailed; resistance to infectious disease would be lessened, and production of enzymes and hormones would fall below the required level

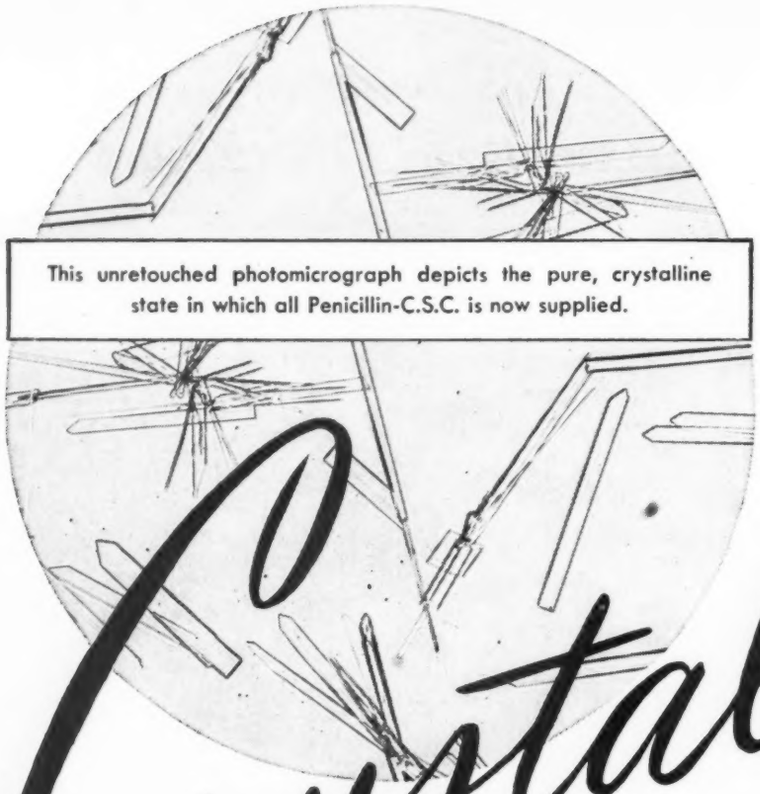
Lean meat may well be called the common denominator of reducing diets. Its protein content is notably high, and the protein it supplies is of high biologic quality, adequate for every protein need.

The Seal of Acceptance denotes that the nutritional statements made in this advertisement are acceptable to the Council on Foods and Nutrition of the American Medical Association.

ACCEPTED AMERICAN MEDICAL ASSN. Council on Foods and Nutrition

AMERICAN MEAT INSTITUTE

MAIN OFFICE, CHICAGO . . . MEMBERS THROUGHOUT THE UNITED STATES



This unretouched photomicrograph depicts the pure, crystalline state in which all Penicillin-C.S.C. is now supplied.

SYMBOL OF PURITY

Crystalline PENICILLIN SODIUM-C. S. C.

As a result of special processes of purification and crystallization, all Penicillin-C.S.C. is now supplied in the form of the highly purified, heat-stable Crystalline Sodium Salt of Penicillin-C.S.C.

Well Tolerated Subcutaneously

In the crystalline state Penicillin Sodium-C.S.C. is so pure that it can be administered subcutaneously even in large doses with virtually no pain or danger of untoward reactions due to impurities.

No Refrigeration Required

Crystalline Penicillin Sodium-C.S.C. is so heat-stable that it can be kept at room temperatures, virtually indefinitely without losing its potency.* It can now be carried in the physician's bag or stored on the pharmacy shelf. No longer need the physician wait until the patient can be hospitalized or until refrigerated penicillin can be obtained from the nearest depot.

*CAUTION: Once in solution, however, penicillin still requires refrigeration.

Optimal Therapeutic Activity

Because of its high potency per milligram, Crystalline Penicillin Sodium-C.S.C. exerts optimal therapeutic activity. A recent report shows the advantage of highly potent preparations.[1]

Potency Clearly Stated on Label

The high state of purification achieved in Crystalline Penicillin Sodium-C.S.C. is indicated by *its high potency per milligram*. The number of units per milligram is stated on each vial, thus enabling the physician to know the degree of purification of the penicillin he is using.

1"The potency of the penicillin undoubtedly affected the results. The first 15 patients, all treated with the same batch of penicillin, were cured. The next 7 patients were treated with the same dosage of a different batch of penicillin. Five of these 7 were not cured. Assays of penicillin used for these 7 patients showed it to be of reduced potency." Trumper, M., and Thompson, G. J.: Prolonging the Effects of Penicillin by Chilling, J.A.M.A. *130*: 628 (March 9) 1946.

Crystalline Penicillin Sodium-C.S.C. is available in serum-type vials containing 100,000, 200,000, or 500,000 units.

ACCEPTED AMERICAN MEDICAL ASSN. Council on Pharmacy and Chemistry

Penicillin-C.S.C. is accepted by the Council on Pharmacy and Chemistry of the American Medical Association

PHARMACEUTICAL DIVISION

COMMERCIAL SOLVENTS *Corporation*

CSC

17 East 42nd Street New York 17, N. Y.

Exploding the *mistaken* idea that Detroit Trust Company settles only large estates

This is the fact: settling *moderate-sized* and *relatively small estates* is our day-by-day business. Of the last 100 estates where we were named to carry out the terms of a person's Will, **37** were under $20,000; **55** under $50,000; **73** under $100,000.

If the size of your estate is modest, it is more than ever important to make every dollar count for your family.

Experience can speed the settlement of your estate, avoid unnecessary costs and bypass red tape. And Detroit Trust Company has the experience to collect assets . . . pay just debts . . . attend to taxes . . . keep accurate books . . . make reports to the court . . . and take care of the many other essential tasks which must be performed before your estate assets can be distributed. Why not come in soon for a talk about your own estate situation?

Whatever the size of your estate, we feel safe in saying that we have settled—promptly and economically—many that were much smaller.

Our Fee Is Probably Less Than You Think

The fee for settling an estate is set by law. The court allows no more to an experienced trust company than to an inexperienced individual. The following fees are for ordinary services and apply to personal property:

ESTATE	FEE
$ 10,000 . .	$ 250
20,000 . .	450
30,000 . .	650
50,000 . .	1,050
75,000 . .	1,550
100,000 . .	2,050

The fee for handling real estate depends on the work involved and is always subject to court approval.

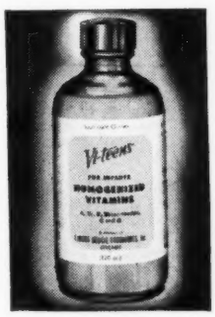
DETROIT TRUST COMPANY

Trust Service Exclusively

FORT AT SHELBY

There is a margin of safety, too, well beyond optimal needs, in Vi-teens Homogenized Vitamins (especially palatable in milk, water, or formula) and in Vi-teens Super Potency tablets.

One Teaspoonful of Vi-teens Homogenized Vitamins supplies the following:	FORMULA	Two Vi-teens Super Potency tablets daily supply seven vitamins in these amounts:
1 Milligram	Vitamin B_1 (Thiamin HCL) (2666 U.S.P. Units)	8 Milligrams
1.5 Milligrams	Vitamin B_2 (G) (Riboflavin)	4 Milligrams
4 Milligrams	Niacinamide (Nicotinamide)	30 Milligrams
———	Pyridoxine (B_6)	2 Milligrams
40 Milligrams	Vitamin C (1500 U.S.P. Units)	75 Milligrams
3000 U.S.P. Units	Vitamin A	5000 U.S.P. Units
800 U.S.P. Units	Vitamin D	1000 U.S.P. Units



LANTEEN MEDICAL LABORATORIES, Inc. . . . . CHICAGO 10

CHLOROPHYLL THERAPY

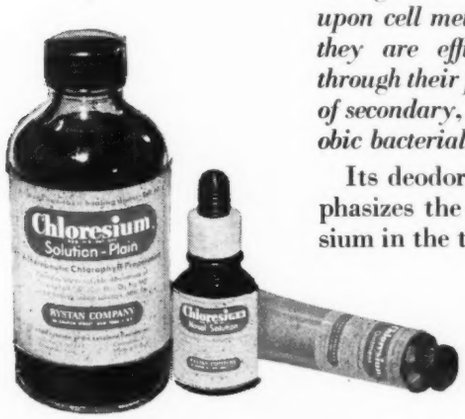
The New Biologic Approach to healing

Provided in Chloresium

REG. U. S. PAT. OFF.

Natural, Nontoxic Chlorophyll Preparations

The application of chlorophyll therapy—the new, *basic* healing principle in the topical treatment of wounds, burns, battle injuries, ulcers and similar lesions, especially those of the chronic, recalcitrant type—is now available to the medical profession in CHLORESIUM, trade name for the therapeutic chlorophyll preparations of the Rystan Company.



Nontoxic—Accelerate Healing—Deodorize

The water-soluble derivatives of chlorophyll "a" have been shown by exhaustive clinical investigations in many leading medical schools and hospitals, during the past four years, to have these distinct therapeutic advantages: (1) *they are completely nontoxic;* (2) *they accelerate tissue repair through their stimulating action upon cell metabolism; and* (3) *they are efficient deodorants through their prompt inhibition of secondary, proteolytic anaerobic bacterial activity.*

Its deodorizing ability emphasizes the value of Chloresium in the treatment of such offensive lesions as chronic osteomyelitis, leg ulcers, severe secondarily infected third-degree burns and even ulcerative carcinomata, where the malodorous problem becomes of paramount importance to patient and physician alike. Prompt elimination of the distressing odors is combined with rapid cleaning up of the wound and the early development of healthy granulation tissue.

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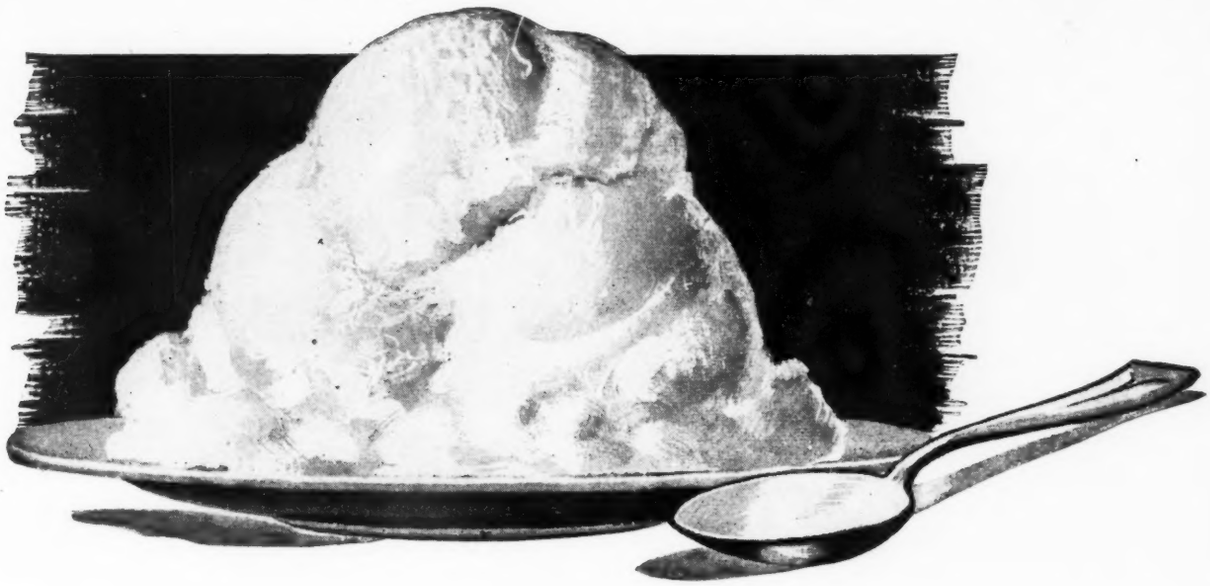

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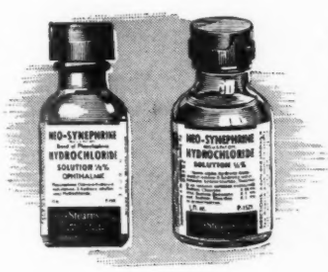

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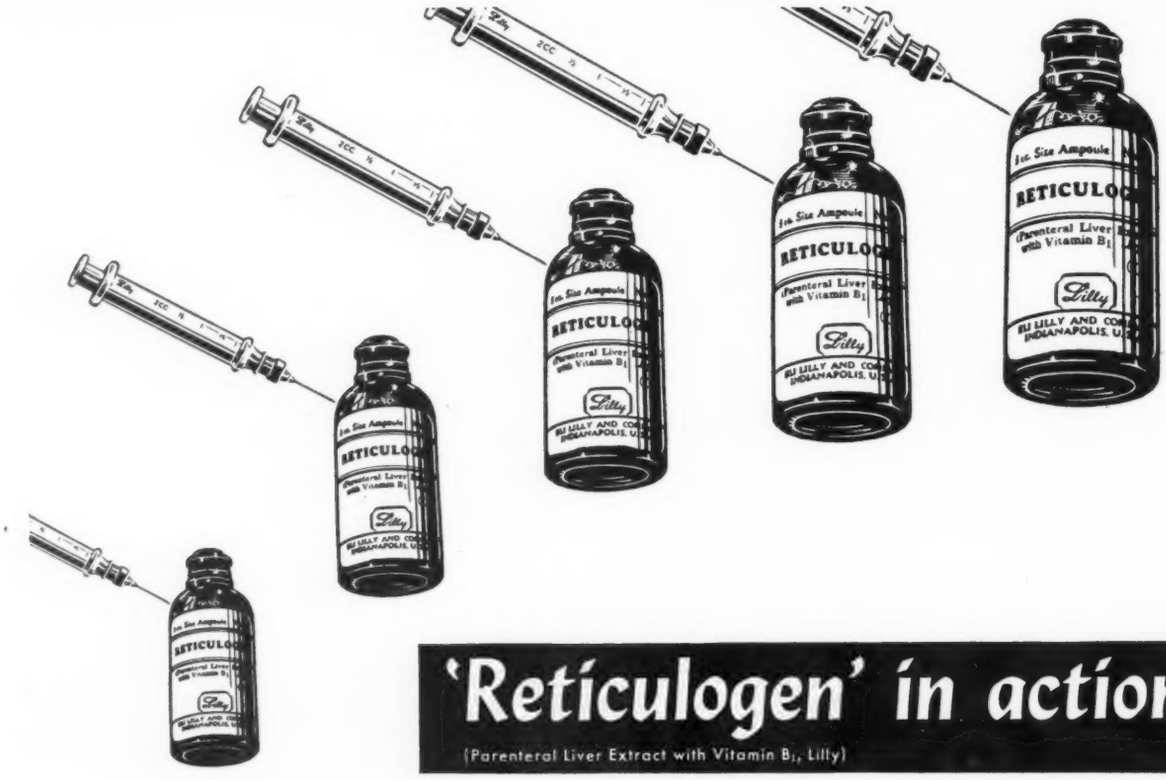

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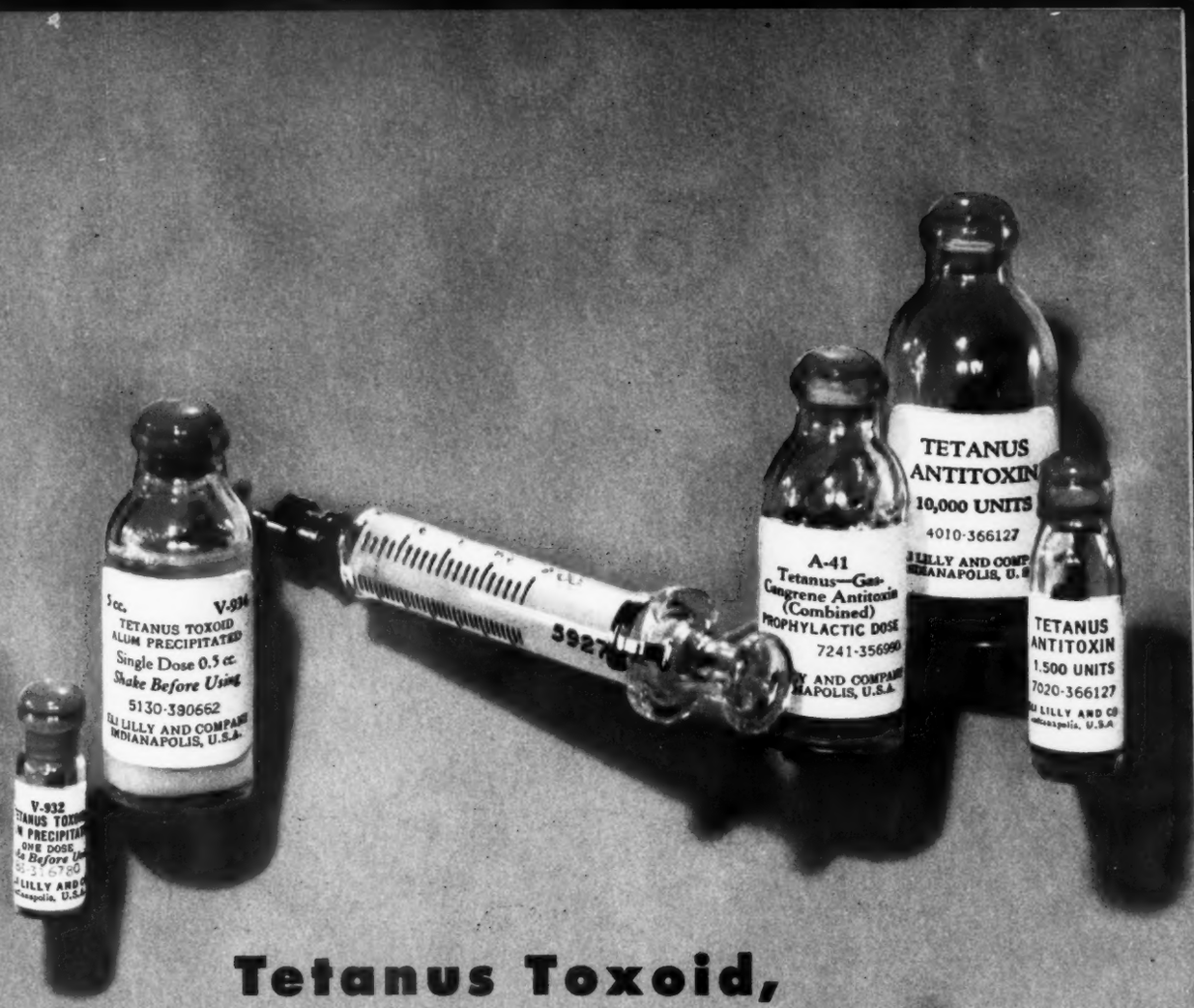

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Far into the night

THERE is little rest for the busy physician even after the responsibilities to his patients have been satisfactorily discharged. Medical journals subsist entirely on the writings of physicians. The articles, designed for the purpose of sharing knowledge with others, require arduous toil, and time not available during office hours. It is well to remember then, in reading medical journal papers, that some physician somewhere may have worked far into the night with the hope that his colleagues would benefit.

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A picture of The Good Samaritan provided the inspiration that

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A Study of the Construction, Impairment and Reconstruction of the Pelvic Floor

An Engineering Problem

By Channing W. Barrett, M.D., F.A.C.S.
Chicago, Illinois

Construction

The muscles in animals meet the varying needs of sphincter control and support and tail manipulation as they assume different degrees of the upright position. In the human species, the sphincter function is retained and amplified, the tail-manipulating muscles develop other uses as the tail becomes atrophied, and the supporting structures reach their highest development to meet the needs of the upright position. This arrangement of muscles and fascia to meet the needs of support encroach upon the space used for childbirth, so that although support is quite adequate, as constructed, many injuries take place and impairment follows, as will be seen.

To get full value from the study of this changing and changed construction, one must comprehend the purpose for which these changes have taken place. An animal that lives in a tree and uses the tail as a support and swing, or a ground animal that uses the tail as a fifth leg, as the kangaroo, or for protection from pests, as the cow or horse, cannot give up all of these coccygeal muscles for support. In the human, where the need of support reaches its high point and the need of tail muscles ceases, we find the group of tail muscles having been converted into broad flat muscles closing the pelvic outlet, and becoming a supporting structure in this region, while in four-footed animals little support was needed.

Andreas Vesalius as early as 1555 described the main supporting structure under the term "Musculus sedem attollens." Sappey in his work published in 1869, and quoted by Thompson, says "the levator ani is one of those muscles which has been studied the most, and at the same time, one about which we know the least." Which, however, is not to say, "the more it is studied, the less is known about it." The works of Savage, Goffe, Hart, Deaver, Anson, Curtis, and others, present the main facts of anatomical construction in a way to be understood by the gynecologist. Thompson and a host of workers make these essentials very plain and pursue the comparative myology away beyond the possibilities of this paper. However, in order to have a working knowledge of the structure of this region, we must follow their structural and functional changes close enough to grasp the meaning and purpose of these environmental changes.

The portion of the abdominal wall which the pelvic floor constitutes is known superficially as the perineal region, as other portions are known, such as the umbilical, inguinal, epigastric, hypogastric regions, et cetera, except that in this region there are more definite outlines, being limited ventrally by the symphasis, dorsally by the coccyx, and laterally, the greatest width, is marked by the tuberosities of the ischial bones. These outlines of a quadrilateral opening are completed by the bony and ligamentous structures which connect these four outstanding points. This area of definite outline is 3.5 to 4 inches in greatest antero-posterior

Read before the Muskegon County Medical Society.

Professor Barrett, a Michigan man, served as Major in Base Hospital 36 in the First World War.

diameter, increased by obstetrical displacement of the coccyx, and 4 to 4.5 inches transversely, constituting about 16 square inches of the abdominal wall soft parts to guard against extrusion, and non-physiologic intrusion upon abdominal and pelvic contents, in this most vulnerable portion of the abdominal wall. This somewhat rounded quadrilateral space is divided into an anterior or urogenital trianagle and a posterior or anal triangle by an imaginary line drawn betwen the two tuberosities and marking the posterior border of the superficial transversus perinei muscles. There is such lack of unison in the term "perineum," and the term "perineal body" is so mythical that it seems best to think of the structures in this area as the pelvic floor or caudal wall.

To the extent that the upright position is assumed, the subject is deprived of gravity to keep viscera away from the pelvic floor, as is the case in four-footed animals, as a means of preventing protrusion. In fact, gravity is now added to other forces to cause protrusion. The sitting position and the absence of the tail shutter of this region subjects these parts to violence and intrusions not seen in four-footed animals.

A study of comparative myology by Holl, Meyer, Thompson, Hart and many others shows the nicety of change which takes place in the tail and sphincter muscles of the lower animals to meet the needs of the upright position. The essential thought of these men cannot be conveyed in any more illuminating way to the worker in gynecology than to quote Thompson. "In the human subject, in whom the erect posture necessitates special modifications, the functions which the pelvic floor is called upon to perform are widely different from those in animals, in which the long axis of the body is horizontal." "In most mammals the weight of the *abdominal viscera* is largely borne by the ventral wall of the abdomen, but in man the weight (of abdominal viscera) is sustained mainly by the floor of the pelvic cavity (also floor of the abdominal cavity) and this is accordingly specially modified to give active support to the burden which has been transferred to it."

The pelvic diaphragm* (Meyer), is a funnel-shaped structure, so changed from the tail muscles as to form by a fusing of the levator ani muscles in the median line, a complete closing structure to the lower abdominal outlet, as the broad ventral muscles constitute the anterior abdominal wall. It should be appreciated that these pelvic floor structures have an added importance over the ventral muscles from the standpoint of support because of their being the lower abdominal wall. Surgically this region has gained a great deal of prominence by reason of the frequent tendency to herniation, due not only to the low position, but also to the fact that this supporting structure is traversed by "clefts" or "faults" for the passage of the terminal ends of the urinary, genital and digestive tracts, the walls of which normally lie in contact, but which for normal functioning, chiefly due to childbirth, open up from moderate to great size. These latter enlargements furnish a great source of impairment of the pelvic floor.

While the so-called pelvic diaphragm as composed of modified tail muscles becomes very important as a structure of support, Berry Hart and John Symington say that the pelvic floor is a thick structure composed of all of the soft structures that close the outlet of the pelvis. This should be visualized as a definite musculofascial structure of three layers of muscles and five layers of fascia to which the skin might be added. We would then not only lay stress upon the distinctly supporting layer and the sphincter layer divided into two layers, but we would call attention to the interrelation of the two primary layers. In some mammals only one sphincter layer exists, but in the human the sphincter layer is divided into the superficial and deep layers, the former consisting of sphincter ani and the three muscles in the superficial perineal interspace, superficial transversus perinei muscles, the constrictor vaginae or sometimes called the sphincter vaginae and the erector clitoridis or ischio cavernosis, and the latter, the deep layer of the sphincter layer, consisting of the compressor urethrae muscles and the deep transversus perinei, which lie in the deep perineal interspace lying between the two layers of the triangular ligament: (considered by some to be the urogenital diaphragm, but has no more reason to be called a diaphragm than any part of the ventral wall chosen at random.)

The triangular ligament (the two layers of deep fascias)
1. the superficial, or inferior or anterior layer of the triangular lig.
2. the deep or superior, or posterior layer of the trinagular lig.

*The word "diaphragm" is a misnomer, as it is used in this region, because of its fancied resemblance to the real diaphragm, whose function it entirely fails to simulate, and is probably best interpreted as an essential part of eight layered musculofascial caudal wall, the other layers being also essential.

The above-mentioned muscles with their covering fascias, while belonging to the sphincter layers, furnish considerable accessory support to the supporting layer.

The so-called pelvic diaphragm, consisting of the modified tail muscles broadened to fill the complete bony outlet with the fascia above and below, is accredited the function of the main support, yet to this support must be added the support of all the accessory muscles and fascias, and any fibrous connective cellular tissue, filling in the pelvic outlet. One should not depreciate the tone and value of all the connective and cellular tissue interposed around the viscera and muscles.

The importance of sphincter control is best understood when we take into account not only the sphincter muscles, but the accessory sphincter aid given by supporting muscles.

1. The external sphincter ani
   1. Sphincter ani externus subcutaneous
   2. Sphincter ani externus superficialis
   3. Sphincter ani externus profundis
2. The internal sphincter ani. A considerable thickening of circular muscular structure in the lower end of the rectal and the anal wall.
3. Sphincter recti—the pubo rectalis portion of the pubo coccygeus. This is a very useful adjunct to the sphincter ani and makes a very respectable sphincter in the absence of the sphincter ani.
4. The sphincter vaginae, as the constrictor vaginae is sometimes called.
5. The pubo rectalis becomes the constrictor or compressor vaginae in extreme contraction.

It will be seen then that injury to or laxness of these muscles will not only affect sphincter control, but will impair the support of the pelvic floor, as no structure running from the pelvic wall to median attachment is to be undervalued as a support.

The pelvic floor, composed of the modified pubo coccygeus, the illio coccygeus, also called the obturato coccygeus, and the coccygeus or sometimes called the ischio coccygeus blended and fascia enclosed, carries the weight of visceral contents, taking the load off the sphincter muscles, but also carries the viscera terminals themselves to considerable extent, and by a snug hold upon the viscera, prevents herniation of the attached viscera.

In spite of the thorough and oft-repeated studies of the pelvic floor, there have been and still are many misconceptions—

1. Of the anatomical structure of the pelvic floor.
2. Of the function of this structure if, and when anatomically understood.
3. Of the supporting importance of these structures.
4. Of its importance as a part of the abdominal wall, subject as are other parts of the abdominal wall to hernias.
5. And above all, especially subject to hernia by reason of its being the low part of the abdominal closure and being traversed by the terminal ends of three tracts, th functions and disfunctions of which subject these visceral terminals and the muscles and fascias of the pelvic floor to such stretching and many tears, permitting many herniations.

Much misconception would be overcome if we would view the abdominal cavity as the large cavity of the body containing many viscera, with a complete abdominal wall composed of bony structures and soft parts. There is a constant struggle under varying conditions between these walls restraining, and viscera escaping through available openings or weak places, constituting hernias, the vulnerable areas being the pelvic floor, the inguinal region, the umbilical region, the femoral region and the diaphragm and operative sites.

If we would consider this cavity and its walls impartially, we could think of the contents exerting force cephalad, where it is guarded by the diaphragm, dorsad, guarded by dense bony structures, ventrad, where there is a wide expanse of flat muscles and fascia with some weak points, laterad, where there is the same broad muscles with less tendency to hernias, and lastly, caudad, which end is narrowed by bony structures to the pelvic cavity, leaving a narrowed opening closed by soft parts, of three layers of musculature and five layers of fascia, so constructed as to make a fairly adequate closure, but which is somewhat subject to hernias by the natural openings and is greatly impaired by childbirth, which stretches and tears the pelvic floor structures comprising this caudal closure, to the full size of the bony outlet, leaving varying degrees of tendency to hernias. This tendency to hernia is greatly increased by the upright position. It is important, however, to remember that the nature of the protrusions is not changed from hernias into prolapses by the position of the caudal outlet, which in the human takes a low position, and in four-footed animals takes a high position, and the nomenclature should not be emasculated or perverted. A condition of the abdominal wall, permitting abdominal contents to pass through, is a hernia, and the protrusion of

abdominal contents through a natural or acquired opening constitutes herniation. Hernias and herniation are a relation of the abdominal contents to the abdominal wall, and the caudad wall is more subject to hernias because of its low position and natural openings. The greatest etiologic factor, however, is childbirth, as shown by the comparatively few cases of hernia seen in non-childbearing women, even in advanced age, and the great frequency of herniation of bladder, uterus and rectum in childbearing women. Very few escape some injury, but in many cases the injury is not so great as to result in disabling herniation; on the other hand, perhaps more endure moderate to extreme degrees of disability, without seeking or obtaining relief. Reasons for this would not be hard to find, but would here take us too far afield.

So great is the effect of the above forces that the small area of the pelvic floor becomes a more frequent site of herniation than any other or all others combined.

If one is now ready, from previous studies of the pelvic floor, of which there are many descriptions, and the suggestions of structure and functions which we have set forth, to accept the pelvic floor area on approximately the same basis as he accepts the anterior abdominal wall area, constructed for support subject to hernia, he is ready to accept the first part of the title of this paper, "The Construction of the Pelvic Floor." If one can see in this structure only lifters of the anus, in the modified tail muscles called the levator ani muscles; if he can see only weak apertures from the edges of which attached viscera prolapse; if he cannot place protrusions through the anterior or posterior pelvic floor cleft exactly on the same basis as he would view protrusions through the umbilical or inguinal clefts; if he cannot look upon the muscles, fascias and all tissues of this interbony outlet as the pelvic floor and therefore as the lower abdominal wall, then he is ripe for a serious study of the best authors on pelvic floor construction before he can understandingly grasp the other two horns of our title, namely, "Impairment and Reconstruction of the Pelvic Floor."

Impairment of the Pelvic Floor

Having seen that the caudad end of the abdominal wall is composed of the pelvic floor, which may be at the low point, as in the human, or at a high point, as in four-footed animals, it will be seen that protrusions are not named by the direction out of the abdomen that they may take, but by the fact that abdominal contents are at this area passing through the abdominal wall. These protrusions are rightfully termed hernias of the pelvic floor, but custom has continued to call them prolapses. We are now ready to consider, for those who are prepared to follow this line of thought, how a portion of the abdominal wall, usually so satisfactorily constructed, becomes so impaired that it is by far the most frequent site of any in the abdominal wall for hernias.

Impairment implies a decrease from a better to a worse condition, and so to make the picture complete, we may be permitted to use the word "defect" to apply to a smaller group of cases which have never attained a satisfactory degree of efficiency. In showing variation in strength or form in this region, developmental processes are but paralleling the development in other regions. In such departures from normal as to be defective, the defect is of greater concern by reason of the impairment which may follow, much as it follows in an acquired defect.

Impairment of this caudal portion of the abdominal wall is vastly of more importance than a tear of what was once thought to be the perineal body. Emmet announced in 1883 that the perineal body was of no significance whatever, and we are not alone in observing that his theories as to vaginal sulci operations were equally inefficacious. If we speak of impairment of the pelvic floor it is to follow a usual custom, and not to minimize this portion of the abdominal wall. Like the ventral portion of the abdominal wall, the caudal portion may be impaired by overstretching, by ascites, by pregnancy, or by a large tumor, or an accumulation of fat, etc. Like ventral structure, such stretching may result in a low, lax, loose pelvic floor that loses its hold upon viscera that pass through it.

By far the most frequent cause of pelvic floor impairment has its beginning in childbirth injuries, but occasionally with other injuries. The injury is far from being the whole impairment. Two women may have the same amount of pelvic floor tear. One has a sheltered life, rest, recumbent position frequently, involution favored, freedom from hard labor and heavy lifting, and the remaining pelvic floor is adequate, after good involution of the remaining portion, at least for a long time. The other woman has the care of

her child and a large family, heavy household duties, or perhaps she takes her child and goes out to the field to plant, hoe, or harvest a crop, or to engage in some other exacting occupation. The heavy organs on uninvoluted ligaments rapidly take advantage of the supports weakened by tear, and further impairment takes place rapidly and herniation ensues.

There are natural impairments which under favorable conditions may be temporary, but which may be prolonged so that they become permanent. Under this head we must mention the heavy structures and the lengthened ligaments and carrying structures. The loosened hold that one structure has upon another directly after childbirth favors sliding. The movement causing more loosening, must be visualized. The natural stretching of the vagina and surrounding pelvic floor structures affording opportunity, and the uterus and vagina temporarily parallel with the longitudinal axis of the body, is a temporary condition calling for rest in bed, Sims and knee-chest posture. Sliding of heavy structures is easily favored by viscid discharges. These natural conditions, if not safeguarded, may easily be turned into permanent impairment.

The impairment found in any given case is made up of the original injury, plus failure of involution, not merely of the uterus but of all carrying structures and all structures to be carried, failure of involution of the bladder, the vagina, the rectum, of all connective tissues, blood vessels, lymphatics, peritoneum, abdominal wall, etc., and plus all progressive and eventual changes and developments which have resulted in moderate to extensive herniations, and no less those changes which have resulted from the developing hernation. This makes a series of disabilities not accounted for by the terms "laceration of the perineum," or "relaxation of the perineum," or "prolapse of the uterus," for there has developed far beyond these, a herniation more or less complete of all adjacent structures, which will require, as a key operation, a pelvic floor hernioplasty and frequently one or more accessory operations.

A musculofascial structure, as has been described, furnishes a complete wall for the caudad end of the abdominal cavity. These structures have a circumference origin and are inserted into their fellows centrally, to the side of the vagina, to the central tendon, to the side of the rectum and anus, to the median raphe, and some insertions are as far back as the coccyx and tip of the sacrum, and Curtis points out that some fibres meet as far forward as the urethra, making a complete closure except for clefts for the passage of tracts whose walls normally lie in contact. As the time for delivery approaches, these structures have become soft and succulent, with increased capacity for stretching. There is, however, a vastly varying degree of preparation. In some cases these tissues seem to me made for getting out of the way of the oncoming head, and this is done with facility and without injury. In another case, the head knocks, but no door is opened. There seems to have been no preparation and there is little stretching. The outlet seems to have no facility for getting located for force to be applied in the right place. A narrow pubic arch forces the head back of the normally located outlet. Whatever enlargement we get is by incision or tear. Fortunately, most cases that do not fall into the first class, are found in between these two extremes with wide variation. Some of these cases tax the capacity of any and all methods to deliver the child without severe trauma. It is perhaps unwise to narrow our resources by the rejection of any means of aiding delivery, but long observation has led me to the opinion that side episiotomy comes very close to ranking as Enemy No. 1 in creating the trauma factor of impairment of the pelvic floor. A median pelvic floor section offers many advantages in freedom of damage and ease of repair, but is claimed by some to offer greater risk to the anorectal structures. Too early use of the forceps is a close second. Sometimes the head is piloted skillfully and safely without tear of the muscles, and then wide shoulders, perhaps less skillfully handled, produce almost any of the known tears.

More common tears are small median tears that separate the attachment of the superficial transversus perinei and bulbo cavernosis from their central tendonous attachment. This may free the insertion of that portion of the sphincter ani which inserts into the central tendon and this allows the anus to be pulled backward. The tear may extend backward involving some or all of the circular fibres, thus resulting in weakness or complete failure of sphincter control. The median tear may extend deeper, freeing the levatores from the central attachment, allowing lateral displacement and moderate to extensive enlargement of the anterior pelvic floor cleft. The muscles and

fascia may be loosened from their vaginal wall and anorectal wall attachment, giving easy opportunity for sliding and herniation of one or both terminal structures. Instead of a median tear, the injury may take place on the sides moderately or extensively damaging the muscles and fascias of the pelvic floor; this may take place on one or both sides. These side tears may take place far enough forward so as not to combine with a median tear, but on the other hand the tear may proceed in the median line separating structures moderately, then running to right and left sulci, one or both doing a variable amount of injury to the muscles and fascia, or separating them, on either or both sides from the vagina and anorectum. We have known the vulva cap to be lifted from the lower end of the vagina, and also have known the upper end of the vagina to be torn from the cervix and pushed down by the oncoming head. Great damage has been done by applying forceps outside the cervix. The head has been known to deliver through the perineal structure between the rectum and vagina and through the anorectal wall. Much damage is done by stretching and tearing of the pubocervical, and vaginal and rectal fascia as well as the uterine liagments, and the vaginal, and the rectovaginal walls. These may be visualized as the immediate impairments of trauma. Some of them are moderate, and as stated, under favorable afterconditions, may give little trouble for many years. Others are so extensive as to make the patient an invalid, and even practically bedridden until properly repaired. Some are easily detected at the time, but others are occult.

These impairments, mild as they sometimes are and severe as they sometimes may be, are augmented until to the disability of the injury is added mild herniations, which may be designated by the terms cystocele, urethrocele, colpocele, rectocele, hemorrhoids, or may develop, sometimes rapidly and sometimes slowly, into extensive pelvic floor hernias consisting of bladder, ureters, vagina, uterus, rectum, and perhaps cul-de-sacs through the anterior cleft and/or the rectum, mesorectum, sigmoid and mesosigmoid, posterior cul-de-sac and small viscera through the posterior cleft. Occasionally a case is seen in which there is no supporting structure from the symphasis to the tip of the coccyx. Usually this is after unsuccessful operations have been performed. In some of these cases there are fairly good pelvic floor muscles and fascias retracted to the side. It is for the experienced or venturesome to recover them and make adequate supports of them, but let us remember that environmental forces brought these structures about for the upright position without knife or sutures, but it took a long time; perhaps it can be repaired in shorter time by proper gynecologic surgery.

Time will perhaps not permit us to trace all the steps from the primary traumatic impairments to the secondary developments that mark the extreme impairments with which our subject must deal. Suffice to say perhaps that the secondary development is set in motion by the trauma that furnished the primary impairment, so moderate as to escape notice in some instances. Added to this primary cause is gravity, the caudad end of the abdominal wall being the lowest portion of the wall. Next we might mention increased pressure, such as increasing fat, ascites, tumor, straining, lifting, coughing, hard labor, long hours of toil, a fall, pressure between objects, lifting a sick member of the family, et cetera.

The development of these herniations does not leave the primary traumas as they were. Herniation structures by their push, and protrusion, and retraction, their come and go, stretch and weaken and change the wall structures which constitute the hernia.

This picture might not be complete without a review of the disabilities which may ensue, but if we undertake to point out and discuss in detail the harm that this herniation is to the bladder, how it strangulates the bladder and the ureters outside the vulva, and waterlogs the kidneys, how it displaces the rectum and anus and constricts them, and produces constriction and retention irritations and proctitis, sigmoiditis, colitis and damage to all points cephalad, it would go way beyond the limits of this paper.

Reconstruction of the Pelvic Floor

If we have not missed the point in impressing the importance of construction of the caudad portion of the abdominal wall, it will be easy to draw the conclusion that as important as childbirth is, it is worth while to make every possible effort to conclude the ordeal with the muscles and fascias still intact so as to avoid the primary impairment. More time, lack of haste, hot stupes, lubrication, full control of the head at the time of passage, full anesthesia in difficult cases, will be valuable

prophylactic measures. I am convinced from a study of cases that we pay too high a price in the damage done by oblique episiotomy. The knife passes far beyond episiotomy, and farther than any spontaneous tear. The levator ani is too thin to lend itself to good repair after deep transverse incision. Usually only that portion which lies beyond the incision remains for repair.

It will readily be seen that if the numerous injuries which constitute primary impairment are followed by the secondary impairment, resulting in further damage to the supporting structure and herniation, great damage to the superimposed abdominal viscera, such as the bladder, vagina, uterus and rectum, immediate repair is worthy of the highest consideration. To make such repairs as nearly safe and certain of result as possible, the delivery should begin and end through a vagina as clean as possible. An unaided, unmanipulated delivery may take place through a dirty vagina, but most deliveries may presume some manipulation of, or into the vagina, such as examinations, forceps, turning of head, pushing back the cord, dilating or cutting the cervix, version and/or repair of injuries.

For easy repair the patient should be in the lithotomy position with the buttocks extending over the end of the table. The opening made by the delivery, is not usually an adequate opening for repair. Frequently the injury to the muscle and fascia does not correspond in location to the skin vaginal wall injury. Frequently the muscles injured in or near the median line slip away to the side and cannot be seen or reached through the tear. The vaginal flap should be raised, irregularities trimmed, and the separated muscles and fascias exposed and brought together under sight. Any structure needing repair should be seen. This exposure is as important as in the repair of injured arm structures by a crushing injury. The separated and injured levatores should be brought together for a new and adequate insertion attachment—the origin of the muscles not usually having been disturbed. The muscles should be united far enough forward to cause the posterior vaginal wall to give a lift to the anterior or vaginal wall and of the greatest importance is the placing of posterior sutures far enough back to make the puborectalis fit snugly around the rectum, to which the muscle should be well attached.

In cases of median pelvic floor section with a lateral extension to the side of the rectum, an essential part of the repair is to sew the severed end of the levator to the anorectal wall and sphincter on the side involved. The pelvic floor restoration is made easily and effectually by a suture which picks up the muscle on the patient's left side, then the right, then about ⅜ to ½ inch farther forward, the left muscle and then the right, tying them across so as to form an *X* as shown in cuts illustrating the late repair. Ordinarily one suture is placed in front of this and one posteriorly. All of these take the full thickness, but not the full breadth of the muscle and its supporting fascias. The superficial layers of muscle and fascia are now closed above the levator repair.

If the tear went back far enough to involve the sphincter ani, the two ends of the sphincter should be brought together in front of the anorectal wall and sutured, and also sutured to this wall and levatores, some ⅝ inch from the skin edge to prevent the rectal wall from retracting. In the superficial closing the purse stringed rectal wall should have a few cat gut sutures attaching it to the posterior perineal angle. If the tear extended up the rectal wall, some form of repair must be made. Some prefer interrupted sutures with knots on the rectal side. Some recommend the knots on the wound side. I much prefer a purse string which brings the rectal wall down to the outlet, thus making the anterior rectal wall complete with no extension of infection from the rectum. I have never encountered a case where the damage of wall was so extensive as to prevent an easy mobilization. As a cleansing measure I much prefer douches in the aftercare. I can see no adequate compensation for allowing a pool of pus to collect in the vagina.

As desirable as is the immediate repair before the secondary impairments have developed, we must admit that the future well-being of the patient is not always favored by these efforts:

1. There is not always a skin or vaginal tear to indicate deeper injury.
2. These primary injuries are frequently in the hands of those having little training in pelvic floor surgery.
3. There has been and is a great tendency to let the accidental vulvovaginal tear do for the surgical opening for repair of deeper structures.
4. The oblique episiotomy does not lend itself to good repair and healing.

5. Even with the best of conditions, there is a higher percentage of non-healing than in gynecological surgery. This percentage is somewhat overestimated due to the fact that efforts at repair have often failed to reach the proper tissues.

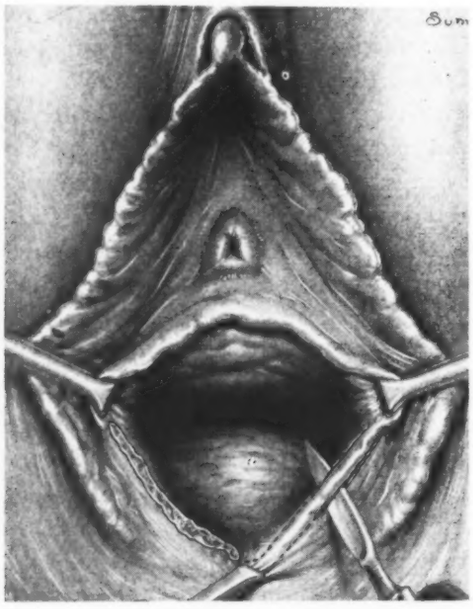

Fig. 1

As desirable as is immediate repair, for the above reasons and perhaps others, many of these patients come for late or gynecological consideration, when herniation has been added to primary injury, and so we have for our study and planning—

Late Reconstruction of the Pelvic Floor

So much have local tears grown into pelvic floor weaknesses and so much have the forces which develop hernias taken advantage of these primary weaknesses, that we now have not merely the original musculofascial injury, but even in mild cases we have cystocolpocele and rectocolpocele, which are known as hernial terms. We find the uterus following and approaching the pelvic floor, the first stage of which condition might well be called "prolapse" as it has not yet come through the abdominal wall, the pelvic floor, but is still a downward displacement only. In a medium case, the urethra and bladder and vaginal wall bulge through the anterior pelvic floor slit the size of a hen's egg or larger; the posterior vaginal wall and anterior rectal wall bulge through the same opening, showing as large a herniation or even larger than the anterior mass; the cervix uteri is showing through the opening and may easily be drawn outside. The pelvic floor muscles are found loosening from the rectum and it is taking a lower position, and the pelvic floor muscles are found far to the side. This is a marked herniation, but the patient may endure, partly because doctors who know little or nothing about this condition tell them there is nothing to be done. Frequently the patient is told "these muscles were torn years ago, they have atrophied, and there is nothing to do." I have heard this hundreds of times. A report of thirty-eight cases in one clinic was made in which "there was nothing to do but close up the vagina." I gave my answer and cannot repeat it here, but it was decidedly against such procedures.

In extreme cases, the uterus is outside. The anterior and posterior vaginal walls run downward from the vulva to the cervix; the bladder is felt on the anterior surface of the uterus, somewhat thickened and partially distended; the rectum is found posteriorly. Lieberthal has demonstrated the ureters coming out the pelvis, being sharply kinked and running back to enter the base of the bladder. Excoriations and necrosis are not uncommon and gangrene is possible from incarceration. These patients may not be so old but that the uterus may contain a foetus when extreme incarceration takes place, but usually they are older. They are stiff and show a certain posture and walk. Perhaps marked herniation of the rectum exists. Perhaps a grapefruit sized herniation of the rectum and a goose-egg sized rectocele alternate as to whether this rectal herniation is in or out.

We have gone into the picture considerably under the head of impairment; we are now recalling it in order to visualize it for treatment. We may have, even after many years, only a mild herniation which the key operation will suffice to correct and restore the normal relations and positions of the vagina and uterus. It is important to consider at this point the scar tissue that may have formed in the region around the trauma in the skin, vagina, around the front of the rectum, and reaching to the sides, especially in extensive tears and those that have been operated on, one to many times. Leaving this scar tissue will but contribute to another failure. All firm scar tissue should be removed, leaving normal, pliable elastic structure to be united. This will often require more definite dissection and exposure of muscle to be brought together.

The Key Operation

This is an important operation, as it is practically the basic procedure of pelvic floor repair. It is not a "perineorrhaphy" for this is a term meaning putting sutures in an open torn perineum, and had its beginning in a superficial placing of sutures in an obstetrical repair. What we really should have in mind in facing all degrees of herniation is a complicated piece of pelvic floor engineering, which not only restores the supporting structures, but also replaces all herniated structures within, or, if need be, removes pathologic or irreplaceable structures.

*Technique of Key Operation.**—The key operation is performed as follows, these needs varying according to conditions:

1. Tooth forceps grasp the hymen remains just posterior to the mouth of the duct of the gland of Bartholin, thus marking the place that will leave the right sized opening for the vagina (Fig. 1).

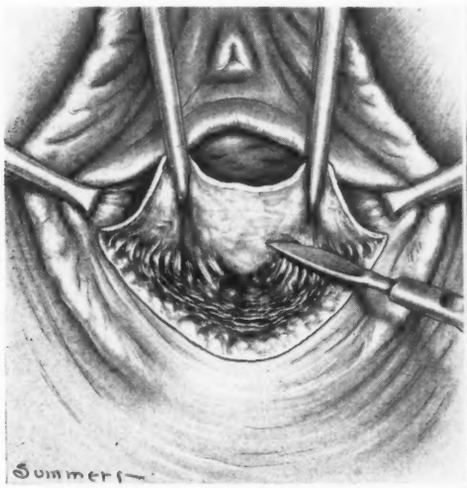

Fig. 2

Fig. 3

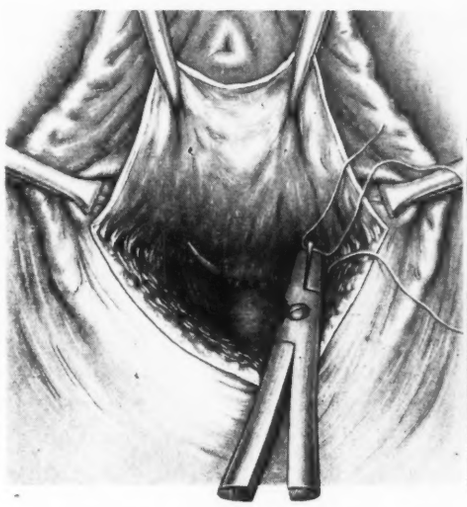

Fig. 4

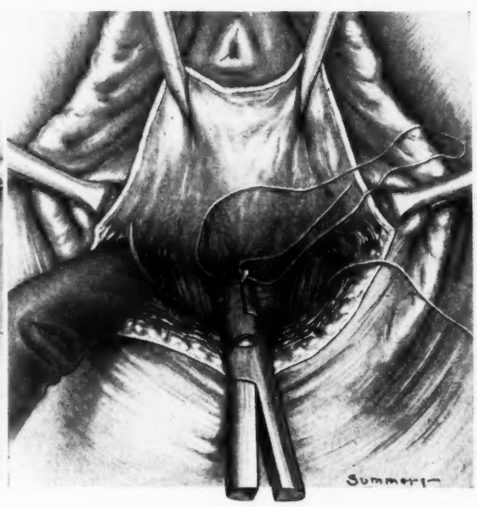

Fig. 5

We lay stress upon making the initial incision at the hymen vestibular junction, and not out on the labia.

2. With a sharp knife, the hymen remains are severed posterior to these forceps so that the vaginal edge is freed as above (Fig. 1).

3. The vaginal edge is picked up and lifted mostly by blunt dissection from the remains of muscle in the central tendon, and higher up from the anterior rectal wall. This opening has a depth of two-thirds of a finger's length and is well above the levatores, separated and lying well to the side (Figs. 2 and 3).

4. The left index finger is placed in the wound

*This was described in the American Journal of Obstetrics and Gynecology, 1909.

above the left levator muscle, while a strong curved needle is made to encircle the border including the fascia, muscle, and fascia. It then picks up rectal fascia and then repeats from above

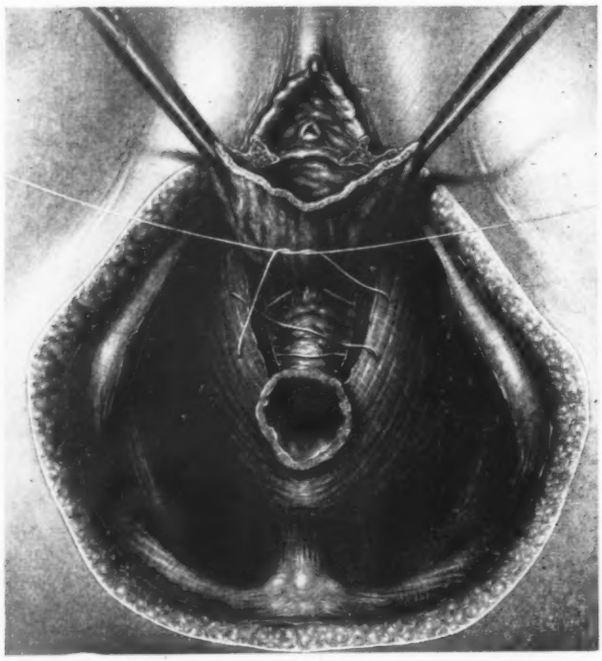

Fig. 6

down through the right levator. The needle then picks up the left levator 3/8 to 1/2 inch farther forward and then the right (Figs. 4 and 5).

5. These muscles were wide apart, furnishing an opportunity for hernia (Fig. 6), but upon mild traction and tying of the crossing sutures, the muscles are approximated and we have the first step of a hernioplastic operation (Fig. 7).

6. Another suture is placed in front of this figure of 8 suture (Fig. 8). The finger in the vagina now tests the remaining size of the vaginal cleft and if this hernial cleft is still too large, another suture may be placed. A posterior suture catches the muscle well to the angle and then takes a bite of the rectal fascia, and then the opposite muscle well back so that the puborectalis muscle is made to grasp the rectum snugly, to which the suture attaches.

7. The excess of vaginal flap is cut away from the hymen forceps on one side to the other, and a purse string suture is run along this trimmed vaginal edge from one side to the other (Fig. 9).

8. A few interrupted silkworm sutures are placed to bring the superficial muscles and skin together (Fig. 10) leaving the vaginal opening, vestibule, suture line and rectum as seen in Figure 11.

This key operation varies somewhat according to the extent of the primary injury and the degree of rectocele, and other herniation, but the variations in the pelvic floor engineering consists more in the selection and carrying out the other measures to fit the individual case. This key operation is a substantial support but is only adequate when redundancy of bladder and vagina are taken care of. The vagina should have a normal direction from forward, upward and backward. The uterus, if proper engineering warrants its retention, should occupy a position at least at right angles to the vagina and in a horizontal fundus forward, cervix backward position. Whether or not this can be accomplished is a part of the engineering problem. If the uterus requires removal, this should precede the pelvic floor repair, as should also the work on the cystocolpocele.

There are also other factors to be considered. If the uterus is past the functioning age it may be removed on slighter pretext. It is much more difficult to save some uteri than to remove them. Then there arises the question of pathology. There are many pathologic conditions other than cancer that warrant the removal of an aged herniating uterus. Removal of the uterus does not solve the question of the vagina. A large, loose herniating vagina requires as much and somewhat the same care to attend to its ligaments as does the uterus when considered leavable. Sometimes a uterus of a non-functioning age is free enough from harm to be left. Sometimes an amputation of a heavy cervix contributes much to good behavior. Oftentimes the amputation is desirable even though the childbearing period is not over. By amputation the weight is lessened, disease is many times removed, and new fixation to surrounding tissue lessens its undesirable excursions.

Herniation of the bladder is lessened by upward and backward fixation of the cervix and upper end of the vagina, by the snug pelvic floor repair, but a hernioplastic operation on the anterior vaginal wall, and the suturing of the pubocervical fascia or ligaments, is often required to prevent the bladder redundancy shoving out over the pelvic floor.

By the key operation on the pelvic floor, by the correction of direction, size and position of the vagina, by the correction of position of the uterus or its removal, and by the hernioplastic operation

to hold up the bladder, we can very satisfactorily take care of the herniations through the anterior triangle. When these primary impairments break over into the posterior triangle, or when the secondary impairments to the pelvic floor lessen the attachments around the rectum, we have need of additional reconstruction, usually to be combined with the key operation.

If the primary or secondary impairments involved the pelvic floor attachments well back to the tip of the coccyx, we may have a herniation involving the whole caudal end of the abdominal wall with extensions of this large herniation through the anterior and posterior pelvic floor clefts.

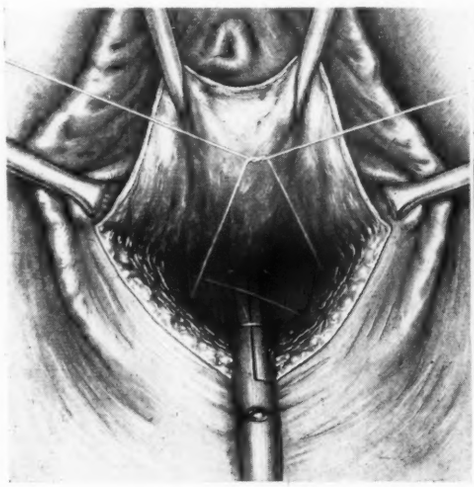

Fig. 7

Fig. 8

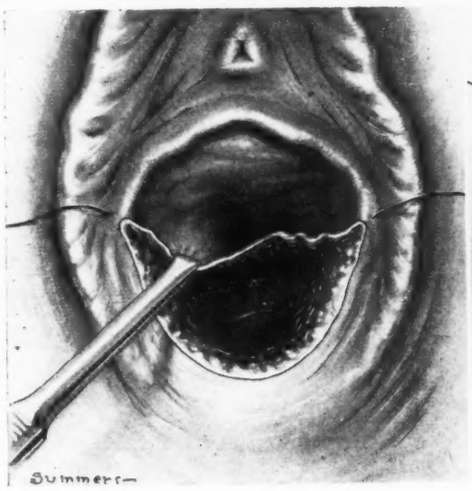

Fig. 9

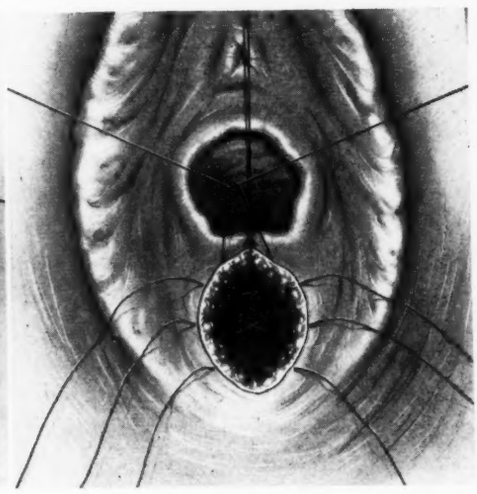

Fig. 10

Reconstruction in the Posterior Triangle

This is usually in addition to the work done in the anterior triangle, but the muscles may lose attachment to the rectum and even extensive herniations take place, in cases with little or no impairment in the anterior triangle, as in rectal herniations in nullipera and in males.

First, we may consider tears in which the sphincter is torn. Usually the sphincter is found to extend only around the posterior half of the anal opening with dimples, one on each side, marking the termination of the sphincter. In late reconstruction of tears which have invaded the posterior triangle and rectum—

1. The removal of all scar tissue
2. The separation of vaginal from the rectal flap deep enough to reach the retracted pelvic floor muscles
3. Special dealing with incomplete rectal wall after the rectovaginal wall has been split
4. Recovering the sphincter ends and bringing them together in front of the mobilized anterior rectal wall

5. Suturing the puborectalis and pubococcygeus far enough back so that they encircle the rectum snugly and attach to the loosened structures to each other.

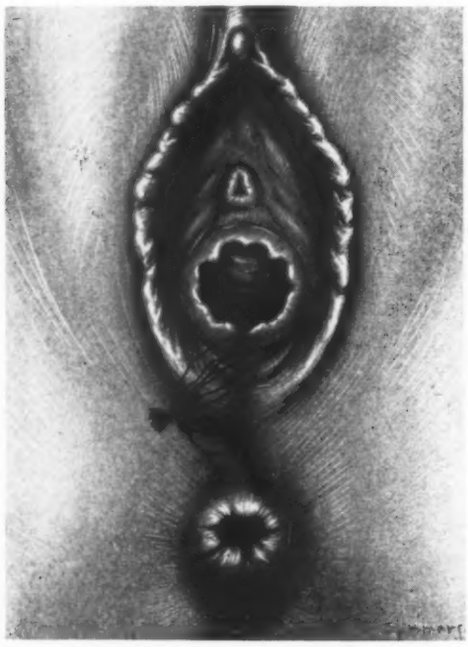

Fig. 11

We have already considered No. 1 under the key operation, but it assumes a double importance here because of the more extensive tears, and the possibility of one to many previous efforts at repair. Sometimes these previous efforts have built up some scar tissue between the rectum and vagina, but have not brought the sphincter ends together, hence the patient continues to suffer from rectal incontinence.

Some inexperienced operators fear the removal of too much normal tissue by removal of scar tissue and a large dead mass of scar tissue is interposed.

The vaginal edge and rectal edge should be relieved of any irregularities and scar edges which are almost invariably present and render such flap operations as the Ristine procedure pathological.

In considering No. 2 we would emphasize the importance of a muscle-to-muscle repair, not only for support but so that the puborectalis may assume its function as an accessory sphincter muscle. The tightening of this muscle is exaggerated if for any reason, such as multiple operations or for other reasons, the action of the sphincter ani seems likely to be weak or absent. In such cases the puborectalis makes a very respectable substitute, perhaps not quite 100 per cent efficient in diarrhoeal bowel contents, when an enema may rid the bowel of troublesome contents.

In dealing with No. 3 we amplify by calling attention to the fact that sutures to close the anterior rectal wall defect, either with knots tied in the rectum or in perineal opening, results in possible leakage, infection, destruction of tissue, and either complete breakdown or in a rectoperineal or rectal vaginal fistula. Sometimes a fistula has resulted from the original tear having healed near the outlet or at some point up the course of the tear, but failing to heal in the part above. Sometimes the fistula results by reason of non-success of a primary repair. Usually the isthmus or perhaps the considerable body of tissue below the fistula looks so important as to make it appear advisable to try to close the fistula, but we have found that the matter is simplified by cutting away the tissue up to the fistula, making the fistulous opening a part of the V-shaped defect.

V-shaped defects, instead of being dealt with by suturing, are best dealt with by a purse string suture which brings the incomplete rectal wall down to the outlet as in the immediate repair, which leaves the anterior rectal wall complete and free from rectal leakage and infection. Occasionally a small or even larger fistula may lie so high as to warrant separate closure.

Under No. 4 we would stress the importance of exposure of the muscle ends so that the sphincter may be made complete in encircling the rectum end.

In the suturing of No. 5 after dealing with rectum and in the described key operation, it may be claimed that more pelvic floor structure is brought together than is normal. We cannot claim to duplicate the fine construction and interweaving of the fascias and muscle fibre which normally hold the pelvic floor muscles together with the minimum of structure and so the muscle union is exaggerated, but any stiffness and grossness of this structure is apt to be due to the unremoved scar tissue.

Patients with perineal repairs, even including the rectal repairs, may be considered fit for childbirth through the normal route, with few exceptions. There have been a few cases with great destruction of tissue, numerous operations, up as high as nine, ten, twelve and fourteen, after getting a serviceable and satisfactory repair, in which a Cesarean section is to be greatly preferred.

The average case, however, may have a vaginal delivery with a median separation of the muscles with immediate operative repair. Such a case should have surgical preparation of the vagina and external genitals with surgical conduct of the case, with surgical aftercare as befits an area subject to possible infection from the vaginia and rectum. After years of experience I am not sympathetic to a pool of pus in the vagina, in obstetrical or surgical cases, as will be the case if douches are omitted. In some clinics douches are forbidden, and in others the nursing force is so prejudiced as to lead to nearly the same result.

Herniations of the Posterior Triangle

We come now to those impairments of the posterior triangle. The divisions of the caudal end of the abdominal wall into two triangles is no doubt due to one being occupied by the genital terminals and the other by the alimentary tract terminals. The one is studied by the gynecologist, the other occupies the thought of the proctologist, and they have been dealt with as though they were two separate structures, but a little more thought brings out the observation that the caudal wall in the human occupies a low position and the support for one structure is the support for the other, and that impairment to the insertion in the pelvic floor muscles affects the support in both structures. The impairments to support in the anterior structure tend primarily or secondarily to cause lack of support to the rectum. Again, if we try to divide the conditions according to tracts, we have rectocolpocele, one of the most common of the pelvic floor herniations that inseparably involve both tracts. Again, pelvic floor tears extending into the rectum complicate the two tracts so that they present an inseparable interest.

We have herniations resulting from descent of the posterior peritoneum which Moscowitz insisted was a hernia, but dealt with under supposition of its being a prolapse. C. Mayo speaks of general protrusion as in reality a herniation, but deals with it under the head of prolapse. Montgomery and Jeff Miller have made noteworthy efforts to recognize the hernial nature, but mixed their efforts with too much prolapse.

The cul-de-sac may or may not end up as part of rectal herniation. It may come low and not point at all, or it may bulge toward the vagina or it may bulge toward the rectum. It may push the rectal wall down to emerge with the anal opening, when it becomes a herniation, or it may bulge through the pelvic floor at the perineum, and become a perineal herniation, or bulge into the vagina and then with the vagina pass through the pelvic floor. A process of peritoneum may find its way through some defect in the levator muscle and proceed downward and protrude posteriar to the rectum at some point in front of the coccyx.

We are not now speaking of those rare hernias seldom seen, but rather of the very common condition of rectal herniation meaning rectal protrusion throughout the posterior cleft through the caudal wall of the abdomen. These together with the protrusions of the genital structures through the anterior cleft are usually erroneously called prolapses. In the author's article entitled "Hernias Through the Pelvic Floor," *American Journal of Obstetrics* 1909, these were definitely demonstrated as hernias. I have never seen this denied, but the habit is strong so that many now do some form of hernioplastic operation for so-called prolapse of the uterus. Rectal surgery has not been so fortunate. These protrusions are called prolapse and dealt with as prolapse, the hernial feature receiving almost no attention. Cuneo and Sénéque have proposed an external operation for taking the slack out of the sphincter and levatores through an anterior or posterior incision. A perineorrhaphy for enlarged pelvic floor cleft in the male was suggested in the 1909 publication and performed numerous times through a U-shaped incision posteriorly. Allen's case was a noteworthy example of a complicated condition of herniosis, called a herniation and dealt with as such. We should not lose sight of the fact that many men do a commendable repair under a diagnosis of "prolapse" and "relaxation of the outlet," but here logic takes a vacation.

Reconstruction of Pelvic Floor in Rectal Herniations

As these conditions are incited by injury or loosening of the pelvic floor, allowing the rectum to slide through, the mass playing back and forth through the opening enlarges the opening still more. The bowel thereby is allowed to herniate still further. The amount herniated may be a considerable mucous membrane, or a mass or ring of hemorrhoidal tissue, or an inch of the bowel wall or more up to several feet may herniate. It results in edema and swelling and infil-

tration, which may cause any of these to be strangulated or the circulation to be cut off. The herniation may go on rapidly or slowly until the bowel may be herniated 1 foot, 2 feet, 8 feet or 10 feet, although this latter condition would be rare. The mass might be long and only moderately increased in size, or it may be short and thick, more like a muskmelon. The tissue may be in fairly good condition in the small herniations, but in a marked condition of degeneration in the larger ones, due to strangulation. The opening through the sphincter and that through the pelvic floor may vary from 1.5 or 2 inches in diameter, up to a size which readily admits a fist, and in rare cases the hernial ring is about equal in size to the bony outlet. The finding of this enlargement of the rings with visceral protrusion through, establishes the diagnosis of hernia beyond the question of a doubt, and as such to call the condition by the improper and belittling term of prolapse leads to the undertaking of some procedure upon the bowel, with nothing done to correct the hernial opening.

While these conditions occur in men, and in women who have not borne children, we have noted a marked interrelation between rectal herniation and genital herniation. Injury to the pelvic floor injures rectal support. The same muscle weakness is involved in both herniations. Rectocele is a great factor in loosening the rectum until with some unusual lift or strain the rectum is driven through the weakened enlarged opening. Rest in bed, replacement and retention might do something. I would lay great stress upon trying to keep the mass inside for a while, in order to improve the tissue for a radical operation, in the severe cases. If the rectal herniation exists alone it is a point greatly in favor of success in operation. If the mass is small or moderate it is a favorable point. If the tissue is in a healthy condition, a favorable outcome may be expected. In extensive herniation, with tissues in bad condition, even after efforts to improve them, the work may be done on the rectum, with the genital and bladder repair reserved for another sitting.

The Intra-Sphincterian Hernioplastic Repair

1. A sharp knife encircles the protruding bowel at skin anal junction just inside sphincter ani, and the gut is turned down over the inside portion. If the herniation is somewhat extensive, the mesentery should be tied posteriorly to control hemorrhage.

2. The sphincter ani is now retracted forward by a narrow retractor while the bowel is drawn backward and the levatores are exposed on each side, and two to four cat gut sutures are placed to bring the levatores together. The bowel is now drawn forward and the sphincter is retracted backward, while two to four sutures are made to pick up the pelvic floor pillars as in front.

3. Sutures now pick up the front angle of the skin ring, and sphincter ring and the pelvic floor muscles, then the reverse order on the right side. Two or three of these sutures are used to reduce the sphincter and skin opening. Now the bowel is drawn forward and two or three sutures are placed posteriorly to reduce the size, as in front.

4. The levator muscles are attached to the side of the bowel. The bowel is now cut off the proper length and the skin and sphincter is attached to the bowel end, leaving the sphincter and skin opening much reduced and of a size for the anal opening. The sphincter ani is now much assisted by the snug pelvic floor structure.

A small wick drain may be inserted anteriorly and posteriorly. We are of the opinion that a good sprinkling of sulfathiazole is helpful and will be used by many. Penicillin is to be recommended in bad cases and blood transfusions may be necessary.

Anterior herniation will not infrequently be associated, and it remains a problem of pelvic floor engineering to say whether the repair of these anterior impairments should receive attention at the same time or later, depending upon the extent of the operation, and the condition of the tissues and the condition of the patient. I believe it would be justifiable at times, with bad condition of tissues, to cut the herniation away, leaving the bowel a little long, and after attaching it to the skin with a suture tied loosely on each side, leave the hernioplastic operation for a later date. In that case a generous sprinkling of sulfa drugs will be justified, we think.

Even this lengthy article leaves much to be said. We have aimed to keep away from the skin mucous membrane, perineal body, posterior colporrhaphy, intra-abdominal, atmospheric pressure, prolapse myths, and present the subject on the basis of its construction and pathology.

In a pelvic floor injury, resulting urethrocele,

cystocele, rectocele, colpocele, metrocele, proctocele, anocele, enterocele, etc., all hernial terms, it seems wise to substitute the term HERNIOSIS or CELEOSIS instead of the inaccurate terms of prolapse and procidentia, as prolapse, descensus, ptosis, refer to downward displacement in the abdomen, but have no reference to the abdomial wall; herniation, hernia, breach, rupture and cele refer to abdominal wall injury with protrusion of abdominal viscera into or through the injured abdominal wall. The term herniosis and celeosis refers to the general protrusion of different structures in this region. These protrusions are hernias only when they have passed the musculofascial openings and only then are they entitled to the suffix "cele" which signifies hernia. The time is past when one can diagnose these conditions as "prolapse of the uterus" and "a relaxed or broken-down outlet." It is distinctly an injured caudal wall with a multiple herniation or herniosis, and on that basis only can we do a twentieth century restoration to function.

We have stressed the hernial nature of all protrusions of pelvic and abdominal viscera through the pelvic floor and have done so in our clinics and in writing for many years.

1. The construction of the pelvic floor constitutes a distinct closure for the caudad end of the abdomen until impairments take place.

2. Childbirth impairments furnish an opening for secondary impairments and hernial developments.

3. Reconstruction of the pelvic floor constitutes a widely diversified hernioplastic operation, sometimes calling for the key operation, and frequently one or more accessory operations, such as anterior hernioplastic repair of vagina and fascia, amputation of cervix, ligament operations upon the uterus, sometimes hysterectomy, ano-rectal reconstruction, sphincter repair, hernioplastic operation for rectal herniation and hemorrhoidal herniation.

4. A consideration of the construction of the pelvic floor, of impairment, primary and secondary, of developing herniation, of the necessary steps for effectual repair and carrying out of such reconstruction is nothing short of scientific pelvic floor engineering.

5. It is important in essaying this kind of reconstruction work to be able to visualize—

(Continued on Page 933)

Interpretation of Serologic Reports for Syphilis

With Special Reference to False Positive Reactions

By Venereal Disease Control Committee
Michigan State Medical Society

THE PROBLEM of false positive serologic tests for syphilis is a very serious one. The more this problem is investigated the more confusing it becomes. This is especially true with asymptomatic or latent syphilis in which the diagnosis must rest almost entirely on such serologic evidence. Absence of a history of syphilis in such patients means little since experience shows that no history indicating time of infection[2] can be obtained in two-thirds of such women and one-third of the men. A diagnosis of latent syphilis must be accepted on serologic evidence alone in many cases.

False positive serologic tests for syphilis were considered rare in the past except in a few diseases such as yaws, leprosy and possibly malaria. Experience with draftees, military separatees, marriage certifications, blood bank testing, et cetera, is emphasizing the fact that such false positive reactions are rather common, particularly with precipitation or flocculation tests (Kahn, Klein, Eagle, Mazzini, et cetera).

Experience in the Social Hygiene Clinic of the Detroit Department of Health has revealed the following interesting statistics on probable incidence of false positive reactions. Draftees rejected for military service in Detroit during the first year of our recent World War because of two successive positive serologic tests for syphilis were referred to this clinic for further disposition. There was usually a lapse of three to twelve weeks between rejection and being contacted for interview. Of such cases not referred to private physicians for diagnosis and possible treatment but examined in this clinic, eight per cent proved to be negative for syphilis, both clinically and serologically under follow-up examinations. In other words, eight per cent of such cases must have had only temporary seropositivity due to some intercurrent condition other than syphilis.

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Reprints of this article may be obtained from the Michigan Department of Health, Dewitt Road, Lansing, Michigan.

An even more illuminating and possibly alarming situation has developed in military separatees. One hundred and fifty of such separatees, mainly from the Southwest Pacific theater, were selected for study. These cases had a doubtful to strongly positive serologic test at the time of their release but denied any history of syphilis or treatment for same. Many claimed that previous serologic tests had been negative. A history of malaria was given in many cases but in others no history could be obtained of any infection or condition recognized as a common cause of false positive serologic reactions. In this group, of 150 selected cases, 43 per cent proved to be entirely negative both clinically and serologically (Standard Kahn and Quantitative Kahn) and were placed on further follow-up with no positive findings to date. Forty per cent of this group have fluctuating weak positive titres to both Kahn diagnostic and quantitative tests and are being carried under further observation. The majority probably represent nonspecific reactions. Others represent treated cases but history denied, or partially burned out late latent or congenital syphilis. It is hoped that under further observation the serologic trends, spinal fluid findings or further history will establish either a positive or negative diagnosis. A positive diagnosis of syphilis has been made in only 17 per cent of these 150 selected cases. *It is recommended that such a conservative attitude to the serodiagnosis of syphilis be more generally followed.*

The list of diseases recognized as causing false positive serologic tests for syphilis is being constantly augmented. Some of the recent additions are vaccination, serums, infectious mononucleous virus pharyngitis and bronchitis, undulant fever, chancroid and lymphogranuloma venereum. In addition certain individuals have persistent false positive reactions usually of low fluctuating titre which may persist throughout life. Lower mammals, such as the ox, horse and sheep show consistently positive serologic reactions for syphilis. Kahn[1] explains false positive reactions as a biologic transfer to man of this tendency. It is suspected that such biologic or false positivity may occasionally be present in rather high titre. The titre may be stimulated or increased by any of the growing list of conditions already mentioned. *Fortunately, such increased titres usually reverse to negative in three to twelve weeks after the provoking factor is eradicated.*

Comparative serologic evaluation studies show that in general the more sensitive the test the less specific it becomes for syphilis. The desire to increase sensitivity to a point where a positive reaction will be secured in practically all cases of syphilis leads to an increasing number of positive reactions in nonsyphilitic individuals. It is the opinion of this committee that this is especially true of precipitation tests.

Intensive investigations are being made to develop a test or antigen that will be specific for syphilis. Kahn[2] has developed his "verification test." Pangborn[3] has developed a phospho-lipid antigen from beef heart (cardio-lipin) which it is hoped will prove much more specific. Spirochaetal antigens have promise and investigation of the globulin and lipoid fractions in human serum with which positive reactions may be linked are promising. A generally accepted method of differentiation between false positive and specific reactions is not available at the present time. Until that date the following recommendations are made for the guidance of physicians faced with the problem of serologic interpretation.

1. A general weakness of physicians is a tendency to depend entirely upon the laboratory for the diagnosis of latent and late syphilis and to neglect a detailed physical examination for any clinical evidence of the disease. This should include complete examination of the stripped patient for any evidence of genital and mucous membrane lesions, rashes, reflexes, scars, bone changes, stigmata of congenital syphilis, a careful cardiovascular check and a spinal fluid examination.

2. A failure to get a detailed history of the patient and his family is also a common error. This should include any previous history of blood tests, venereal disease, any treatment or suggestive treatment, and history of syphilis in the family or of previous marriages. Inquiry should be made as to recent illnesses, vaccination, et cetera, that may have caused a false positive reaction.

3. A single test, no matter how strongly positive, should not be considered diagnostic in the absence of clinical confirmation or history of syphilis. At least repeat the test. An error may have occurred.

4. Weak positive or presumptive or exclusion tests, even when repeated should not be considered diagnostic of syphilis in the absence of clinical findings or history.

5. Spinal fluid examinations should be more extensively utilized in making a decision as to the

interpretation of questionable serologic tests. A positive spinal fluid report will solve the problem of interpreting such a questionable test.

6. When a false positive reaction is suspected get both a complement fixation and a precipitation test. The laboratory of the State Health Department is prepared to do and report both tests on specimens designated for diagnosis. If the two tests are not confirmatory, suspect a false positive reaction.

7. Quantitative (determining the degree of dilution required before a positive reaction disappears or becomes negative) precipitation and complement fixation tests are desirable in such questionable cases. A progressively dropping titre suggests a false positive reaction. A fixed or increasing titre suggests syphilis.

8. Blood serum from questionable cases may be sent to Serological Laboratories of the University Hospital, Ann Arbor, Michigan for a "verification test." A report of a biologic false positive reaction may strengthen the backbone of both physician and patient to follow a further observation policy.

9. It is essential that serological tests be secured in all cases intensively treated with arsenic, penicillin or both. It requires one to six or more months for serologic reversal. Meanwhile, the only way serologic progress can be satisfactorily followed is by quantitative tests. Observation only is indicated as long as the titre is dropping progressively and the patient remains clinically negative. A serologic relapse as a warning of clinical relapse can only be detected through a quantitative test, if it should occur before the standard blood test becomes negative. Quantitative tests may be secured through the laboratory of the State Health Department on request.

10. In a patient with no history or clinical signs of syphilis (including spinal fluid) there can be little harm in waiting a year or longer to reach a decision if in doubt as to the presence or absence of syphilis. Once treatment is begun there can be no recourse but to accept the diagnosis and follow the patient as a syphilitic for life.

11. We know of no short cut to an immediate decision in questionable cases except to establish serologic trends through prolonged observation. This is unfortunate particularly where prompt marriage certification is desired.

12. While this paper deals primarily with interpretation of serologic reports in relation to false positivity, a word of warning should be given in relation to the interpretation of negative tests and serological fastness.

(a) A negative test does not eliminate the possibility of syphilis, particularly in late cases. Accept characteristic clinical findings as diagnostic in late syphilis in spite of serologic results, and give the patient at least the benefit of a therapeutic test. It has been commonly stated that far more cases of syphilis are missed because of negative serologic tests than are mistakenly diagnosed as syphilis on a basis of false positive tests.

(b) In early syphilis reversals of serologic tests with older methods of treatment (arsenic and bismuth) to negative should not be accepted as evidence of cure Such cases should receive the amount of treatment that experience indicates is required to cure, regardless of serologic status (40 arsenicals and 40 bismuths on a continuous alternating schedule as recommended in 1941 by the Michigan State Venereal Disease Committee). Otherwise relapse is the rule.

(c) The converse of (b) applies to serologic fastness. A patient with a persistently positive serologic test after adequate treatment (30 arsenicals and 60 bismuths as recommended in 1941 for the late latent luetic by the Michigan State Venereal Disease Committee) should be carried under observation only, provided the spinal fluid is negative and no clinical evidence of activity exists.

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Syphilis and Penicillin Therapy

By Venereal Disease Control Committee
Michigan State Medical Society

SINCE THE original studies by Mahoney and his associates[6] there is adequate proof that penicillin regularly administered in adequate amounts over a long enough period of time will cure a large proportion of patients who have acute syphilis.[7,8,10,11,15] Its use in syphilis and pregnancy and syphilis in the newborn seems just as effective.[3,4,12] In central nervous system syphilis, most authorities agree that to date the clinical course and spinal fluid changes, following its use, compare favorably with those found after therapeutic fever.[1,2,9,13,14,17,18]

The advantages of penicillin therapy in syphilis consist of its relative ease of administration, nontoxicity, and rapid spirochaetocidal effect. Most courses of therapy are completed in seven and one-half to fifteen days. The reactions, incident to its use, are minor and in 14,000 cases treated in the U. S. Army by Pillsbury[10,11] only one patient did not complete his course because of drug reactions. The fact that almost all patients who begin such therapy complete the full course is an exceptionally important factor in the management of an acute, infectious disease such as syphilis. Toxicity varies from mild Herxheimer reactions, consisting of fever, accentuation of lesions present or urticaria, angio-neurotic edema and exfoliative dermatitis. Most are mild and seldom need worry the physician who is responsible for the treatment.

Spirochaetes disappear from the lesions in a matter of hours[1] and in most patients lesions are healed by the time the treatment is completed.

Treatment Plans

There still is no agreement on the problem of optimum time dosage relationship in the treatment of any of the types of syphilis. Penicillin alone, combined with arsenic, bismuth, arsenic and bismuth, and fever are being used. Other salts than sodium penicillin are likewise being given, as well as more slowly absorbed compounds such as penicillin in peanut oil and beeswax. Most reported studies in acute syphilis consist of the administration of penicillin by the following plans:

1. 40,000 units of penicillin given every 3 hours for 60 doses. The total amount received is 2,400,000 units.

2. 40,000 units of penicillin given every 3 hours for 120 doses. The total amount received is 4,800,000 units.

3. 20,000 units of penicillin given every 3 hours for 60 doses, plus 40 mg. of oxyphenarsine hydrochloride given daily for 8 doses.

4. 20,000 units of penicillin given every 3 hours for 60 doses, plus 40 mg. of oxyphensarine hydrochloride given the first, third, fifth, seventh, and ninth day, and 0.2 gm. of bismuth salicylate in oil the first, fourth, and eighth day.

5. 20,000 units of penicillin given every 3 hours for 60 doses, plus 0.2 gm. of bismuth subsalicylate given the first, third, fifth, seventh, and ninth day.

The comparative value of these several systems of treatment must be determined in the future, and many other plans both initiated and tried before the final answer is known. It would not be premature to say that all are effective and the actual differences are minor, except that any schedule incorporating arsenic is more toxic than one with bismuth. Penicillin alone is the least harmful of any. Any schedule used must be given as regularly as possible to obtain the greatest effectiveness, and the maximum time between doses of sodium or calcium penicillin must be no longer than 3 hours.

The results of such treatment can only be measured by the healing of the lesions, by the fall of the quantitative serological test to negativity and by its subsidence there. Reinfectivity is also proof of cure if super infection is denied. The problem of relapse versus reinfection is now a major one because there is ample evidence that penicillin biologically cures patients with early syphilis. As a result, that which is thought to be a relapse may be instead reinfection.[15]

TABLE I

	Total Cases	Per Cent Relapse—6 mos.
Primary Sero-Positive	274	1.8
Primary Sero-Negative	271	12.2
Secondary	111	27.9

Relapse

Available figures show the relapse rate to be in proportion to the age of syphilis. Table I from Pillsbury[11] using schedule I is illustrative.

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Although some members of this group may well be reinfection, the trend of relapses show how important it is to diagnose and treat syphilis as early as possible.

Relapse may occur early or late, but most relapses appear either as serological or clinical ones during the first six months after treatment. Table II from Pillsbury[11] is illustrative of relapse incidence. If no signs of relapse appear during the first year, it is reasonable to assume that relapse will be unlikely thereafter.

TABLE II RELAPSE OR REINFECTION

Weeks	No. Cases
0- 4	6
4- 8	13
8-12	14
12-16	16
16-20	10
20-24	3
24-28	3
32	1
45	2
Total	68

Results in Acute Syphilis

The per cent of serological cure of penicillin-treated cases at the end of six months, using schedule I is shown in Table III. It is again apparent that the earlier the disease is diagnosed and treatment completed, the much better are the results. Other schedules may cause these figures to vary in each group, but as yet no schedule is ideal.

TABLE III
(From Pillsbury[11])

Type of Syphilis		Per Cent Negative S.T.S. at 6 Mos.
Primary Sero-Negative	656 Cases	98.2
Primary Sero-Positive		87.8
Secondary		72.1

Follow-Up by Serological Tests

The introduction of quantitative serological tests has been of great value in following the course of patients after rapid therapy. Such tests give an accurate yardstick in telling whether the serological course is progressing as expected or whether relapse is evident. By the use of such tests many relapsing patients can be diagnosed as such during the serological phase and re-treated. This may often prevent the appearance of infectious lesions and dissemination of the infection to others. Any patient treated during the acute stages of syphilis should have quantitative serological tests done at monthly intervals for the first year. If sero-negative at the end of that time, serological tests should be done at intervals of two or three months for the next year. The clinical course of a patient, followed by such tests, is shown in Table IV.

TABLE IV
(Mahoney[5])

Days	Diagnostic Flocculation Mazzini	Kahn	Complement Fixation Kolmer
0	44421	4442	444441
1	44421	4442	444443
9	44442	44441	44442
23	432	441	4443
30	4442	4431	4442
37	4421	41	332
44	432	4+	443
51	42	1	4441
58	43	1	—
65	21	—	—
72	21	—	—
80	2+	—	—
86	2	—	—
93	1	—	—

The fall to sero-negativity takes place first in the complement fixation test, which is the least sensitive, and last in the Mazzini, which is the most sensitive. The slow progress in all tests to sero-negativity, after three months, is evidence of a probable favorable outcome, but relapse can and does occur after a long period of sero-negativity. In acute syphillis, quantitative serological patterns usually regress or progress as follows: Low or high quantitative serological tests may rapidly fall to negative and remain there. Another type of serological pattern is seen where the test becomes negative, then after an interval of one or two months again becomes positive. This may mean relapse or reinfection, but in any case, more treatment is indicated. At times patients are seen who have a fall in the titre of the serological test, which is prolonged. If these patient's tests are followed, they may eventually revert to negative, or increase in titre, manifesting reactivation of their infection. More rarely one sees a patient whose serological pattern changes little with the form of therapy used.

Re-treatment

In any case needing re-treatment, the unit dosage level of penicillin and time interval should be the same, but the number of doses and amount of penicillin should be twice as much. If schedule I is used, the treatment scheme would be 40,000 units of penicillin, given every three hours for 120 doses. The total amount received would be 4,800,000 units. *All patients who have been treated for acute syphilis and who have not reached sero-negativity within a year should have a spinal fluid examination.* Probably, a minimum effective treatment schedule for central nervous system syphilis is similar to treatment plan I, except that the penicillin should be given for at least 100 doses.

Syphilis Complicated by Pregnancy

Syphilis complicated by pregnancy can be adequately treated by penicillin alone in the 2,400,000 unit dosage as outlined above.[3,4,12] Here, as in any antisyphilitic therapy in pregnancy, treatment should be instituted as early as possible and the patient followed monthly by quantitative serological tests.

In the group of early pregnancies where treatment was completed and delivery and adequate follow-up of the children reported, the results are better than with our older type of therapy utilizing arsenic and bismuth.[3,4,12]

In women treated while they are pregnant the observation must of course be stringent. Here one might be justified in re-treating without prolonged observation if the serological titre should rise. As long as there is a falling titre or if it has fallen to negative and remains there, there is no need to give further therapy.

The infant born of a mother treated during pregnancy should have a quantitative serological blood test done soon after birth. If the serological test is positive, it should be rechecked at two-week intervals for eight weeks. If the child does not have syphilis, the serological test will become negative during this time and remain so. If, during this period, the serological titre rises steadily, or the child develops syphilitic lesions, a diagnosis of congenital syphilis is justified and treatment should be instituted. If the serological test is negative at birth and there are no clinical signs of syphilis, the blood test need not be rechecked for one month, and if again negative, it should then be rechecked at monthly intervals for three months. If at any time in this period a positive test is obtained, more frequent testing should be done. X-ray studies of the long bones is also of much assistance in establishing a diagnosis.

In infants treated for congenital syphilis, the same follow-up routine as suggested for early syphilis should be utilized.

Syphilis of the Newborn

Penicillin therapy offers an ideal form of the therapy for use in the treatment of syphilis of the newborn, especially in the very small infants where the intravenous route of medication is difficult.[7,8,9]

Here dosage should vary according to weight and although smaller amounts may be adequate, it now appears that penicillin should be administered on a basis of 40,000 units per pound of body weight for the total course of treatment with a minimum of 600,000 units being given. Thus any infant weighing under fifteen pounds would receive 600,000 units, and could be given 10,000 units every three hours for 60 injections.

In very small, cachectic infants, prematures, and those with marked syphilitic involvement, the dose for the first day should be reduced, even to the point of giving only 200 or 500 units at each injection. This deficiency may be made up by portioning the extra amount among the later injections. A severe Herxheimer reaction in these infants may be such as to cause death, and it can largely be avoided by reducing the penicillin content of the first several injections.

Latent Syphilis

Little can be said of penicillin in the treatment of latent syphilis at the present time. Penicillin therapy appears to have merit, and is being tried. It is still too early to draw any conclusions and for the time being its use should remain on an experimental basis. Until more information on its evaluation is available, it is recommended that routine arsenic and bismuth therapy be used in the treatment of latent syphilis.

Syphilis Masked by Previous Penicillin Therapy

In the treatment of gonorrhea relatively small unitage and few injections of penicillin are given. These may delay or entirely mask the later appearance of a primary lesion or secondary eruption of syphilis obtained at the time the patient was injected with the gonococcus.

Patients treated for gonorrhea should always be suspected of having obtained a syphilitic infection at the same time. Monthly checkup examinations for atypical primary or secondary lesions and monthly serological tests for six months should be demanded of all such patients.

Summary

Although we still do not know the optimum dosage, time interval between doses, or total dose of penicillin to achieve the best results in the treatment of early, prenatal, or central nervous system syphilis, its low toxicity, ease of administration, and therapeutic effectiveness warrant its place at the top of any therapeutic program.

Penicillin should be given in early sphilis in amounts of at least 2.4 million units in seven and one-half days and the time interval between injec-

tions should be no longer than three hours, around the clock. This makes hospitalization of such patients mandatory.

Combinations of penicillin and oxyphenarsine hydrochloride, bismuth, or both may be better than penicillin alone in early syphilis, but the evidence is not yet available that this is true.

In central nervous system syphilis, penicillin should be given in amounts of at least four million units in twelve and one-half days. Repeated courses of the same amount may be necessary.

The use of delayed absorption techniques utilizing large single doses of penicillin in mixtures such as calcium penicillin in peanut oil and beeswax have not as yet been evaluated. Until such time as the value of such substances in various treatment schedules is determined, they are not recommended.

No better expression was ever coined than Stokes' statement that "from A.D. 1943, it will take a year to guess, two years to intimate, five years to indicate, and a decade or more to know what penicillin does in syphilis."[16]

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The Possibilites of Cure in Far-Advanced Cancer

Case Reports: "Curative" Operations Upon Far-Advanced Growths; Cancer Still Localized at Necropsy

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THE HORIZON for operative removal of abdominal malignancy has widened. "Within the past ten to fifteen years, transfusion, anesthesia improvement, chemical and electrolyte equilibrium, protein and vitamin nutrition, and chemotherapy have so reduced operative and postoperative catastrophies that a vastly increased scope of operative removal of malignant growths is now possible." All this places an increased responsibility upon those undertaking the treatment of cancer.

Extensive far-advanced growths must now be re-evaluated in the light of the increased opportunities which the above discoveries have made available to us.

Brunschwig[3] has just reported 100 resections for far-advanced cancer. Although thirty-four died within four weeks, ten are now living for an average time of four years after operation. The cases are extremely far advanced and the procedures very extensive—such as resection of the left lobe of the liver en masse; wide removal of growths which already have fixation and extension to the pancreas, duodenum, spleen, and adrenal. Extensive mesenteric deposits are no contra-indications to removal. His only limitations are: "widespread peritoneal metastases, extensive hepatic metastases, and inability to encompass the growths by the incisions for resection."

His conclusion is that "50 per cent of the patients representing a group hitherto regarded as beyond appreciable benefits from radical surgical therapy were afforded some measure of relief which

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it is believed could hardly have been received by more conservative procedures."

Howes and Shapiro[14], from the Brooklyn Cancer Institute, have published forty-two cases, all of whom were initially referred to the institution with advanced and recurrent carcinoma supposedly beyond attempt to cure. Following operation, diathermy and x-ray procedures, they were all ambulant and in good helath for 2½ to 14 years, the average being 4½ years. Included in the series are five patients who had had a previous laparotomy and had been considered hopeless at that time; sixteen were recurrences after primary excision had been attempted.

Their conclusions were that 70 per cent of the patients admitted to the Brooklyn Cancer Institute are definitely benefited by palliative methods of treatment, and that five per cent of advanced cancer can be salvaged. "This compares not unfavorably with the approximate five year cure rate of eighteen per cent generally reported for all cancers."[14]

In order to illustrate this point of view, i.e. the possibilities of cure in the later stages of cancer, we have reviewed our experiences of the past few years at Mercy Hall Hospital and Tumor Clinic and selected the following case reports. They are arranged in two groups:

1. Patients who were referred to Mercy Hall for terminal care in a supposedly hopeless stage, yet upon whom operative procedures were done in an attempt to cure.
2. Patients dying in the institution and on whom autopsy revealed a still localized lesion.

"Curative" Operations upon Far-Advanced Growths

Ca Fundus Previously Diagnosed Hopeless Cancer but Found Suitable for Operation (total hysterectomy)

Ann K., aged fifty-eight, was admitted November 16, 1945. She has never had a complete menopause, but has had episodes of bleeding from the vagina every two or three months since the age of about forty-eight (ten years). There has been some lower abdominal pain intermittently for the past ten years. In July, 1944 (one year and four months before present admission), a diagnosis was made of carcinoma of the fundus uteri and radium treatment advised. A series of radium treatments was given. On July 6, 1944, she had 1,400 mgm. hours. On September 1, 1944, she had 500 mgm. hours, and again on October 27, 1944, she had 500 milligram hours making a total of 3,200 milligram hours in three treatments over one and one-half years. Admission examination showed a pale, chronically ill, mentally depressed white female complaining of some burning and frequency on urination. Pelvic examination showed the uterus firm, about two and one-half times normal size and movable. Cervix was hard and movable, but was smooth. There was a fairly advanced radiation reaction on the cervix. It bled somewhat on examination but there was no tumor or ulceration on the cervix itself. HGB was 70 per cent, RBC was 5,380,000, WBC 14,050, NPN 47.5, Chlorides 475. A review of the slide of the curettage done in October, 1944 (two years before admission), revealed adenocarcinoma of the fundus about grade two.

The uterus was not too large and was only moderately fixed. It was decided to do a laparotomy with the possibility of doing a total hysterectomy, even though the prospects were not good.

Operation, performed November 16, revealed a large boggy, globular uterus the size of a three-month pregnancy. There were a few small subserous nodules. Both adnexae seemed normal. The uterus was wedged down in the pelvis, and the posterior-inferior portion was somewhat large. Hysterectomy, total complete, was done including cervix and adnexae. The uterine structures were somewhat glazed by the irradiation therapy. The attachments to the uterus were clamped and divided very easily. The posterior portion of the cervix was somewhat difficult to remove because of the narrowness of the pelvis and the boggy enlarged nature of this portion of the uterus. Convalescence was smooth except for some wound infection which healed promptly. Microscopic examination: very anaplastic cellular solid sheets of cells, with practically no tendency to differentiation. It was now much more anaplastic than the biopsy of two years before.

Comment.—The problem of radium treatment for carcinoma of the fundus uteri is still unsettled, and indications are drawn differently by different clinics. There is a trend in some clinics to rely upon irradiation alone for the treatment of carcinoma of the fundus. This is sharply opposed in other centers. Some feel that grades 1 and two do not respond well to irradiation and should be operated upon. By some the size of the lesion is more important; small cancers of the fundus being cured easily by any method. There is more agreement that highly anaplastic cancers are better given pre-operative radiation and later surgery rather than immediate hysterectomy. Only by combination of methods will a high per cent of cures be obtained.

The tortuosity and irregularity of the carcinomatous uterine canal, as a repository for a curative dose of radium inserted into it, is a special problem. The single radium or tandem applicator may avoid and leave untreated a large cancer area. Ingenious devices to improve this have been tried.

Some of these are: several wires with tandem applicators attached at different angles (Friedman[9]); multiple applicators containing small capsules on hinges (Martin[9]); "irradiators" of various sizes to fit the irregularities of the endometrium (Heyman[9]). Kaplan[16] devised a silver wire, shaped like an oval shaped coil, filled with radium capsules and introduced after the configuration of the cavity has been outlined by the injection of an opaque medium into the uterine cavity.

When the specimen from the above case was cut open, a long tortuous uterine cavity and a large boggy tumor mass were revealed. The endometrial cavity was filled by a large cauliflower growth showing little tendency to invade the uterine wall. In all probability, even in the best hands, the growth would have been inadequately treated with radium. All of the tumor could not be reached, and the carcinoma farthest away from the endometrial cavity would not get an adequate tumor dose.*

Advanced Carcinoma of Rectosigmoid, Post Colostomy Four Months Ago. Resection, Subsequent End-to-End Anastomosis, One Year Later

Nancy K., aged thirty-five, was admitted to Mercy Hall, June 2, 1944. She had been operated upon March 13, 1944, three months before admission. She had had constant diarrhea before that operation but no loss of weight. There had been pain with enemata and it had been very hard to get return. The operation had consisted of a colostomy. The proximal opening was almost pencil sized, but it functioned satisfactorily. The distal loop opened immediately above the pubis. Evidently she had had a Lahey type colostomy. Why the patient had not returned to the original hospital for the secondary operation and resection was not known. At any rate, she presented a colostomy for presumably a carcinoma of the rectum which had been done four months before. After some deliberation it was decided that it was worthwhile exploring to see whether the condition was positively inoperable.

A second operation was performed, June 8, 1944. The abdominal opening of the distal loop immediately above the pubis was turned in, and the previous midline incision was re-entered. A mass could be felt in the lower bowel loop just above the rectosigmoid junction. There were no glands in the immediate vicinity of the growth. The mass was found to be about 2 inches long and the lower end was about 1 or 1.5 cm. above the peritoneal reflection. Except for some dense adhesions to the pelvic structures, it seemed localized. There were no glands palpable along the iliac vessels or the mesentery along the spine. The liver was negative to palpation.

The mass in the rectosigmoid was removed. One or two adherent loops of small bowel in the pelvis were left alone. In freeing the growth, a perforation was revealed and an abscess cavity was entered. The lumen of the bowel communicated with a pocket above the fundus uteri and toward the iliac fossa. This was separated away by blunt dissection. The bowel was cut across from about 2 inches below the growth and the distal end turned in aseptically over a Furniss clamp, a double row of inverted sutures placed and the abdomen closed. The patient's condition would not warrant any further extended procedure, and it was uncertain whether, in view of the gross perforation and the adherence to the posterior peritoneal wall, there had not been too much local extension to contraindicate radical surgery. The patient was told that perhaps at some later date, if the growth had not extended, an attempt might be made to close the colostomy and reunite the bowel. She convalesced satisfactorily and gained weight.

At the third operation, performed February 2, 1945, a transverse colostomy was made, preliminary to an attempt at reuniting the lower bowel. For the fourth operation, March 19, 1945, the planned procedure was to reunite the sigmoid to the lower rectum, but after the abdomen was entered the uterus and adnexae were quite matted down with adhesions. It was quite difficult to separate these out, and it was decided to do a supravaginal hysterectomy including both adnexae and close over the stump of the cervix. Another attempt was made September 3, 1945. Again when the pelvis was exposed adhesions were quite dense, and by the time the rectum was carefully identified, the patient's condition did not warrant very much more operating. Accordingly one or two sutures were placed on the stump of the rectum and the abdomen closed. The sixth operation was performed November 28, 1945. Her condition had now improved so that anastomosis could be made with safety. The colostomy in the left inguinal region was freed from its abdominal wall and skin attachment and the sigmoid mobilized. The stump of the rectum was easily seen and dissected free. There was sufficient bowel to bring the upper loop down and effect an end-to-end anastomosis. There did not seem to be very much tension on the suture line. The abdomen was closed with drainage. On December 9 bowels moved spontaneously through the rectum, even though the transverse colostomy was still patent. At the seventh operation the transverse colostomy was closed and normal bowel function followed.

Comment.—Oftentimes carcinoma of the rectum and sigmoid is very slow growing, and tends to remain quite local while an extensive mass invades contiguous structures. Attempt at radical removal should be made if one can at all en-

*Gray, Friedman, and Randall[11] have just reported six cases of adenocarcinoma of the fundus uteri upon whom panhysterectomy was done thirty to sixty days after careful irradiation dosage ranging from 6,000-12,000 mgm. hours.

"Nests of apparently viable cancer cells were found in the superficial myometrium in six out of the seven excised uteri, with deeper extension in three. Three patients had metastasis to the ovary."

These authors carefully reviewed the literature to find out exactly what the statistical evidence was for the pre-operative value of irradiation in carcinoma of the fundus. Their conclusion was that the available statistics are based on small series varying from ten to thirty-seven cases. The five year arrests range from 38 per cent in thirty cases to 90 per cent in ten cases. Series of as many as 100 cases with uniform radium treatment, in doses of 4,000 mgm. hours or more, should be available before the role of pre-operative irradiation can be evaluated.

compass the involved regions. Large portions of the bladder wall, trigone, one ureter, prostate can be removed with hope of cure or marked palliation (Dixon and Benson[8]) at operation. It may be difficult to tell the difference between inflammatory infiltration and neoplasm, as in the above case. Dixon and Benson advise proceeding with the resection in this event, because "no further subsidence of the inflammatory mass was to be expected, and the diseased bladder continues to 'feed' the infection." They reported sixty-four cases where carcinoma of the sigmoid and rectum was adherent to or had perforated into the bladder. Forty underwent extensive resection, and twenty of these were living; seven, more than five years.

It is not too difficult to find case reports where good results followed secondary resections for recurrent cancer of the sigmoid and rectum. Some of these follow:

Johns[15] (Richmond, Va.) did a Kraske operation for carcinoma of the rectum in a man aged twenty-six. Fifteen years later the growth recurred locally and he was able to do a combined abdominoperineal resection. The patient was well one year later. Gregg and Dixon[12] of the Mayo Clinic report the right half of colon and 20 cm. of ileum removed for cancer of the cecum; two years later they did a wide excision of mass of adenocarcinoma in the abdominal wall.

In another case, the descending colon and 2 inches of the small bowel were resected for cancer of the sigmoid. Nine months later 12 inches of ileum was resected. The colon was normal by x-ray five years later.

Howes and Shapiro[14] report a series of five cases of carcinoma of the colon and rectum, all of which had recurred following previous operations (peristomal recurrence; multiple pericolostomy and abdominal wall recurrences; postlaparotomy massive perforating tumor, et cetera). Following secondary colon and rectum resection they were all arrested or cured in from two and one-half to eight years.

Carcinoma of the Vulva, Referred as Hopeless, Found Suitable for Resection

Mrs. Mary M., aged sixty-five, was admitted February 10, 1945. She had complained of a sore in the left vulva for one year. It started as a small red area on the lower left vulva orifice and had gradually gotten larger. Three months ago it was about the size of a quarter. Biopsy at that time revealed carcinoma, and the patient was referred to Mercy Hall for palliative therapy far-advanced carcinoma of the vulva. It was considered inoperable.

Examination revealed a thin, frail-looking woman. There was a flattened ulcerated lesion on the left lower vulva, about the size of a half dollar. It crossed the midline at the posterior commissure and extended over to the right side. The surface was granular, excavated, and friable. It extended into the vaginal vault for a distance of about 1.5 inches. Beyond this the deeper vaginal wall was clear. The chief problem as regards operability was an extension in the posterior commissure toward the subjacent anterior portion of the sphincter ani. However, a finger in the rectum could feel about 0.5 cm. of firm normal tissue between the rectum and the infiltration of the growth.

There was one suspicious gland in the left groin below the mid-portion of Poupart's ligament; otherwise the inguinal regions were negative. Certainly local radium therapy to this lesion offered nothing. The entire area was quite irritating and painful, and instead of palliation one might get radiation necrosis and more pain.

It was decided to widely resect the local lesion, attempting to preserve the sphincter. If the sphincter was involved or the growth recurred later here, further excision with a permanent colostomy could be done, since this would be infinitely better than the patient's present status.

On March 5, 1945, the growth was widely excised, using a cautery excision for much of the dissection. The sphincter fibers were exposed and carefully preserved. At one place about one inch above the sphincter, the rectum was entered with the cautery. This was repaired with inverting sutures. Convalescence was satisfactory, except that this perforation had to be closed again three weeks later. Rectal continence was established and she has had normal bowel movements since.

The left inguinal mass was watched carefully. The single gland which had been noted on the admission examination did not diappear, so on June 13, 1945, a wide left inguinal gland dissection was done. A long obliquely vertical incision was made from three inches above Poupart's to the lower apex of Scarpa's triangle and all of the subcutaneous fatty tissues widely removed. In addition the inguinal canal was opened, the epigastric vessels ligated, the transversalis fascia divided and the region of the brim of the pelvis exposed. There was only one soft gland immediately mesial to the femoral vessels. Microscopically, this was negative. One gland of the resected mass contained cancer, but sections of nine other glands were negative.

Except for some residual edema in the left leg, recovery was satisfactory and to date (January, 1946), six months following operation, she is well and comfortable. The right groin so far is negative. It is being carefully watched. Resection will be done if any suspicious nodes are palpable.

Comment.—Wide excision of the vulva is the only curative treatment for vulvar carcinoma, all authorities agree. The literature is not extensive,

most texts and reports seemingly quoting Taussig's procedures and statistics. Evidently cases are few, and radical procedures are not, by and large, done frequently. Vulvectomy was done eleven times for carcinoma in 2,971 gynecological operations at the Mayo Clinic in 1944.[18]

A wide radical dissection of the groin can be done which is comparable to that in the axilla. The inguinal canal must be opened, and the path of spread along the iliac vessels searched. This dissection has become more in vogue lately (Pack[19]) although the approach is not new.

Operation on Far-advanced Carcinoma of Ovary with Benefit

Mrs. Laura B., with carminoma of the ovary, recurrent after two operations and x-ray treatments, is alive and well twelve years after the first operation. She was operated upon in June, 1936, at University Hospital, Omaha, Nebraska, when twenty-two years of age. A letter from the hospital stated that "she had had a left oöphorectomy and appendectomy and our pathologist reported adenocarcinoma of the ovary. The left ovary presented small cysts containing mucoid substances and some of these cysts were scattered throughout the abdomen." The operation was followed by deep therapy in July and December, 1936. She apparently felt well until May, 1941, five years later. Then she began to feel bad, had loss of appetite, loss of weight and weakness. There was no abdominal pain. She complained of "lots of gas," took physics every two to five days. There was 15 pounds weight loss. One year later (May 2, 1942) she was operated upon by Dr. M. P. Meyers and Dr. Saltzstein. A large pelvic mass densely adherent to the omentum and pitted with nodules was found.

The operative notes read as follows: "The abdomen contained no fluid but the omentum was everywhere studded with white nodules which were evidently a metastatic malignant spread. There was a 4 to 5-inch diameter right ovarian cyst attached to the lateral side of the pelvis and the remnants of the broad ligament, also attached inferiorly to the bladder at the cervical stump. With some difficulty this cyst was dissected free during which time the contents opened, a grumous fluid escaped and the papillary projection of the inside of the multiocular cyst was seen. Also the right ureter was inadvertently cut across in removing the cyst from the lateral wall of the pelvis. The mass was adherent to the ureter, and the ureter went directly through it. A somewhat smaller mass in the left side of the pelvis was left alone. The right ureter was anastomosed but this did not hold, and two weeks later a right nephrectomy was done. Pathological report of the abdominal mass revealed "papillary cystadenoma. Will produce implantations."

On July 17, 1942, she was referred to Mercy Hall for deep therapy and somewhat hopelessly for terminal care. Following a course in deep therapy, the mass in the left side of the pelvis shrunk about 50 to 60 per cent.

She has been examined at intervals since. At present (February, 1946) she is well and able to earn her living doing housework. A mass about the size of a plum can still be palpated in the left lower quadrant close to the rectum. There has been no recurrence of symptoms, no loss of weight. We had considered further resection of the tumor on the left side of the pelvis, but because of the experience with the adherence to the ureter on the right side we decided against operation.

Comment.—This is evidently one of those papillary cyst adenomas of the ovary which even though widespread in the abdomen sometimes respond to resection of the masses plus irradiation therapy. It is one of the few carcinomas met with clinically, where repeated surgery and radiation can accomplish long arrests, and repeated surgical resection may be indicated. Brunschwig again, in his article, shows photographs of just such a case of papillary carcinoma of the ovary in which at a follow-up visit (four years after first O.R.) multiple intra-abdominal masses were found. He removed several metastatic nodules from various parts of the intestines, peritoneum, and even the liver. The patient was well seven months later.

Cancer Still Localized at Necropsy

Carcinoma of the Stomach Still Local at Autopsy

Carl S., aged forty-seven, was admitted to Mercy Hall August 18, 1943.

Present illness started in August, 1941—2 years ago. At onset there was blood in the stools. He first saw a doctor one month later. X-ray at that time showed a resectable tumor of the stomach causing obstruction. There was frequent vomiting.

Gastric resection had been done two months after onset of symptoms (October, 1941). He felt fine, gained 40 pounds after the operation and was able to eat a full diet. He was improved for about one year. Then there developed a sensation of pressure in the abdomen with fullness. He went on a milk and cream diet with some relief. In March, 1943, he stopped working and since then had become weak again, having lost 25 pounds during the past three months. Pain in the epigastrium and right lower quadrant has been intermittent, appetite poor.

Physical examination on entrance revealed an emaciated thin man with evident loss of weight. There was an indefinite mass, or rather a hard area, in the left upper quadrant. X-ray, August 25, 1943, revealed "the remaining fundic segment of the stomach measured five inches." There was a filling defect 1 inch in length on the lesser curvature which appeared to extend onto the adjacent jejunum where the gastro-enteric anastomosis had been done. There was some delay in emptying the stomach. Hemoglobin, 7.5 gm.; red blood count, 4,620,000; white blood count, 15,300; hematocrit, 18 per cent. Diagnosis: Recurrent malignant lesion involving the site of anastomosis.

The patient was up and about in the hospital for

about one month, feeling comfortable. He required only an occasional sedative; codein daytime, morphine at night. He ate moderate quantities fairly well. Toward the latter part of the month he required more sedation but still usually emptied his food tray.

On September 26, while in the bathroom, he collapsed after a large hematemesis. This continued, and in spite of transfusions and supportive therapy, he died two days later.

Autopsy revealed the cardiac and fundal portions of the stomach were distended by about 1,000 c.c. of dark blood and blood clots. There was a large ulcer just to the left of the previous gastrectomy site, about the size of a half dollar, encircling the stomach stump with an annular ridge of tumor, friable and grey, about 0.5 inch wide and 0.5 inch deep. The lower segment of this ring infringed on the gastro-enterostomy stoma, narrowing it. The carcinomatous ulcer was adherent anteriorly to the undersurface of the liver and posteriorly to the pancreas and adjacent loops of small bowel.

There was no free fluid in the abdominal cavity. There were no metastatic deposits anywhere. The liver was pale and showed some fatty changes; otherwise the abdominal and thoracic viscera were negative. Patient evidently died of a sudden intragastric hemorrhage.

Comment.—This tumor, at autopsy, two years after a subtotal resection, was still local. To be sure, it was a large mass, involving some of the adjacent small bowel, but from the postmortem appearance, resection might have been attempted even as late as his entry into the hospital one month before death.

The trend in gastric surgery for carcinoma is ever wider and wider resection. With the modern control of shock with large quantities of blood and the accurate control of body chemistry, such extensive time-consuming operations are being done with more frequency even in these debilitated patients.

Incidentally, the primary resection for cancer must be very wide of the growth. It should include the glands about the left gastric artery, the entire greater omentum, and a very wide removal of the stomach above the growth. Certain types of gastric carcinoma have a tendency to infiltrate widely in the submucosa, so that the extent of the lesion on gross palpation may be misleading. This patient still had 5 inches of stomach above his resection, and at autopsy the organ held 1,000 c.c. of blood.

Secondary extensive resection for carcinoma of the stomach, months or even one to two years after a previous operation, are being reported with increasing frequency. One of Howes' and Shapiro's[14] cases was that of an extensive tumor—a large palpable mass considered inoperable one year before. Subtotal gastrectomy was done, and the patient was well six years later.

Brunschwig[3] reported the following remarkable results: Subtotal gastrectomy for carcinoma of the stomach with extensive lymph node and omental metastasis. Carcinoma had perforated two months previously and was repaired in another institution. The patient remained well two years, then died of metastasis.

Another case: "Resection of transverse and descending colon and segments of ileum and jejunum for obstruction due to metastasis from gastric carcinoma resected two years previously. Lived two years with normal activity most of this time.

Carcinoma Esophagus Still Local At Autopsy

Celkia K., aged seventy, was admitted to Mercy Hall, November 9, 1944.

Four months before, food "began to stick in her chest," and there was occasional vomiting. Dysphagia became progressive until about two weeks ago, since which time she had been unable to swallow even water. Then she sought hospitalization.

Examination revealed a dehydrated and emaciated old lady unable to swallow even liquids without distress. X-ray showed a carcinoma of the lower esophagus causing complete obstruction. There was also an enlarged heart from hypertension, a dilated and tortuous aorta, and some emphysema. A gastrostomy was done November 21, 1944. The patient was taught to feed hrself, and she was sent home. She died at home seven months later (June 24, 1945). She had been comfortable most of this time, had taken her gastrostomy feeding regularly and maintained her strength. She died suddenly.

Autopsy revealed the cause of death to be a tear or rupture of the intima of the ascending aorta, 2 cm. in length, producing a large blood clot in the periadventitia of the ascending aorta, with descent of the blood clot into the pericardial sac, tamponading the heart.

The esophagus exhibited a well-circumscribed oval shaped neoplasm extending from the cardia of the stomach 4 cm. upward in the distal end of the esophagus. It was firm, solid, not friable, and had not invaded the serosa. There were no regional or distant metastases. Intra-abdominal organs were otherwise negative.

Death was thus due to a rupture of dissecting aneurysm of the aorta. The esophageal carcinoma was still local and resectable (provided the vascular system could have withstood the procedure) seven months after gastrostomy had been done.

Comment.—During the past five to ten years, the operation for carcinoma of the lower end of the esophagus had become well standardized. The symptoms come on early and are striking. The transthoracic approach permits of wide exposure and is even less shocking than the abdominal ap-

proach. In the future, many more of these cases will come to resection. What was an extreme rarity, is now being reported from several sources with increasing frequency and not too much risk: i.e. transthoracic resection of the lower end of the esophagus with intrathoracic anastomosis of the stomach to the proximal end of the esophagus.*

Carcinoma of Pancreas Still Local At Autopsy Four Years After Palliative Operation.†

Mattie A, aged thirty-eight, was admitted to Mercy Hall, March 9, 1945.

She was operated upon at Women's Hospital by Dr. Wm. E. Johnston. We are indebted to Dr. Johnston and Dr. Frances Ford for the notes from this Hospital Admission.

The patient had complained of pain and tenderness underneath right costal margin to back for one year. Jaundice developed two weeks before admission to Woman's Hospital in July, 1941. She weighed 90 pounds, had a hemoglobin 60 per cent, red blood count 3,250,000.

At abdominal exploration July 25, 1941, the head of the pancreas was the size of a large plum, round, and hard. Gall bladder was distended, common duct dilated. No evidence of gall-bladder disease.

Cholecystgastrostomy was done and biopsy specimen taken from the pancreas. Miscroscopic examination revealed "new growth consisting of anaplastic epithelial cells having a ductal differentiation. Adenocarcinoma of head of pancreas (ductal in type). Malignancy grade 2."

The jaundice disappeared twenty-one days after the operation and the patient went home. She had evidently been fairly well for four years since the operation, was doing her own house work and felt strong. However, during the past eight months, i.e., since August, 1944, she had failed. There had been edema of the legs since July, 1944. She had not eaten well and had lost 40 pounds in the past eight months. She had evidently been on a deficient diet for the last eight months in that she never ate any fruit or milk.

General examination revealed a very emaciated, thin woman. Abdominal examination was negative except for scars of previous examination.

Blood count showed moderate anemia, red blood count 3,200,000 with 62 per cent 10.5 gms. hemoglobin, white blood count 6,300.

X-ray revealed a defect in the pyloric portion of the stomach close to the duodenum which was thought to be pressure from an extragastric mass. The stomach itself showed no intrinsic lesion.

Her course in the hospital was further downgrade. She appeared mentally deficient, said many foods were not good for her, seemed lethargic, weak, not interested in her surroundings and died three weeks after entrance to the hospital on April 29, 1945.

Autopsy revealed a large adenocarcinoma involving the head and mid-portion of the pancreas. It was a nodular, grossly spherical tumor mass 8 x 10 cm. in diameter, but was entirely localized, and could be shelled away from the smaller distal portion or tail of the pancreas. When removed it left the bed of the pancreas clean and free; there were no fixed extentions which would have prevented resection, and there were no local or distant metastases.

Microscopic examination revealed adenocarcinoma somewhat more malignant than that shown in the biopsy taken at the laparotomy in 1940, but still easily recognizable as the same cell type.

Summary. A case of carcinoma of the pancreas, proven by biopsy in 1941, and at autopsy in 1945, still local and apparently (as far as autopsy appearances showed) still resectable.

Comment.—Carcinoma of the pancreas is notoriously a disease of short duration from the onset of symptoms to exitus. The total lapse of time between these two events is given as six months[4]; nine months, average (two and eighteen months extremes in eight patients not operated upon)[7]; six to eight months[2]; seven months[1]; five to eight months; longest, two years.[20]

Ransom[20] reviewed 109 cases of cancer of the pancreas at the University of Michigan Hospital in 1938. The average duration of symptoms before admission was 5.5 months, and the average length of life after palliative operation of cases in that institution by a previous report (Coller and Winfield[6], 1934) was 7.2 months.

Ransom states, "In view of the notoriously rapid progress and relatively short life history of the disease, the histories of illness lasting over one year are perhaps open to question. In such instances it is quite possible that symptoms antecedent, such as gall-bladder disease, peptic ulcer, et cetera may have merged with the earliest symptoms of cancer." He further states that "long periods of relief of symptoms (following palliative operation) are occasionally reported. In such cases one is driven to the conclusion that the mass felt at the time of the operation was in fact inflammatory rather than neoplastic and that the internal drainage of the biliary tract resulted in a permanent cure."

Lahey[17] states, "Many of these patients live comfortably for several months (following palliative short-circuiting operations) and occasionally two to three years before dying from slow-growing carcinoma within the head of the pancreas." But he added "The length of time over which some of the patients upon whom we have done chole-

*Clagett[5] recently reported that he had done the last eighteen resections of the cardiac end of the stomach and lower esophagus without mortality.

†This case is reported in detail elsewhere.

cystenterostomy for jaundice have lived can be explained only by the fact that in some of the cases the obstruction was benign in character." Other authors have similarly expressed the feeling that long-time arrests were probably benign conditions rather than cancer.

We have not been able to find an instance in which a patient with proven carcinoma of the pancreas lived four years after operation, such as happened in this case. There are, however, occasional reports of carcinoma of the pancreas which are still local at time of autopsy, and upon whom, as far as gross autopsy appearances went, a radical resection might have been done.

Gordon-Taylor[10] states: "In one case of my own in which three palliative operations of diverse nature had already been performed during the previous fifteen months and in which the diameter of the tumor was nearly 3.5 inches, the affected portion of the head of the pancreas was found at necropsy still to retain mobility and showed no involvement of the portal vein or its parent tributaries, and there were no metastases."

In Ransom's series, in thirty autopsies five tumors originating in the biliary ducts were still localized, while two pancreatic cancers, one in the head and one in the body, were still local. Hick and Mortimer[13], in fifty necropsies, found three cases in which no metastases were found. These were scirrhosis carcinoma of the head of the pancreas. Rives[21] et al. reported that eight cases out of ninety-six were found at necropsy to have localized and resectable lesions.

The lesson clearly is that, with modern surgical improvements in technique and availability of large amounts of blood, there is a wider scope for operative removal. Involvement of the stomach, duodenum, middle colic vessels, even a portion of the portal vein are not absolute contra-indications to wide removal. Such resections represent an attempt at cure or long-time arrest, not palliation for a few months.

Carcinoma of the Larynx

Tredo T., aged fifty-five, was admitted to Mercy Hall November 13, 1945.

He complained of hoarseness in February, 1945. He was treated for sinusitis without any improvement until March, 1945. At that time the carcinoma of the larynx was discovered. He was given x-ray therapy starting March 21, 1945, and received daily treatment for twenty days. It was discontinued for 6 weeks, and then he received 16 more treatments completing this cycle July 16, 1945. There was a progressive weakness and he says no improvement of hoarseness.

Admission examination revealed a rather heavy man, chronically ill. There was marked hoarseness and considerable dyspnea. He was comfortable sitting in bed only and could not lie flat. The laryngeal examination revealed that the right cord was fixed. There was a smooth nodule in the posterior commissure on the right side. The epiglottis was deformed, and there was edema of the right pyriform fossa obstructing the vision of the tissues in the base of the fossa. There was no necrosis. The cervical nodes were negative. The skin of the neck showed minimal radiation changes. Hemoglobin was 76 per cent, red blood count 4,720,000, white blood count 8,800.

Course in hospital: Patient was alternately quite dyspnoeic and then more comfortable. For a few days he scarcely could breathe, and then he felt better and he breathed more easily. Repeated laryngeal examination showed about the same condition. One day before death he was examined carefully. The aperture seemed sufficiently large for easy breathing. However the patient complained of some hoarseness. That night he seemed more comfortable, conversed easily and seemed in good general condition. The next morning at 6 A.M., the patient suddenly choked, gasped, could not get his breath and expired suddenly.

Postmortem: The right pyriform fossa was occupied by an excavated granular ulcer 1.5 cm. in depth. It appeared to have started at the base of the epiglottis, extended laterally to involve the pyriform fossa and downward along the aryepiglottic fold toward the cricoid, and produced fixation of the right vocal cord by spreading underneath the mucosa without eroding it.

There was considerable edema above and below the vocal cords, which seemed to be post-radiation inflammatory reaction. There was very little breathing space between the vocal cords—it was scarcely possible to push an artery clamp through the aperture.

Comment. The location was extrinsic in the pyriform fossa. This is considered by most laryngologists to be a contraindication to laryngectomy. However all surgeons do not feel so.

Patients are often given prolonged x-ray therapy and not observed carefully enough for complications which the x-ray therapy itself produces. In this case the edema and difficulty in breathing were produced, in part at least, by x-ray therapy. We had considered doing a tracheotomy while in the hospital, but were a bit reassured by the temporary improvement in the patient's condition. At autopsy it was easily seen that there was considerable edema at and above the vocal cords and it would have been several weeks before this entirely subsided. A tracheotomy should have been done shortly after admission to the hospital or before instituting therapy. Further treatment could then

have been more intensive; perhaps local cauterization and radon seed implantation to the carcinoma in the pyriform fossa, or perhaps consideration of laryngectomy later.

Carcinoma of the Rectum, Recurrent, Still Local at Autopsy.

Harvey K., aged sixty-nine, was admitted to Mercy Hall, July 8, 1945, and died October 18, 1945.

His present trouble started in July, 1945, about one year before admission. There was diarrhea alternating with constipation. This was treated with medicine for a while; later blood was seen in the stools. He was examined and the diagnosis of carcinoma made, and local operation for this was done in February, 1945, five months ago. There was loss of most of his sphincter control after this operation. Examination revealed a fairly well nourished man seemingly slightly pale. Locally the normal sphincter ani was replaced by a firm stricture which bled and was quite tender on examination. Hemoglobin was 62 per cent, 10.5 gms., red blood count 4,317,000, white blood count 12,750.

After some weeks' observation at Mercy Hall, it was decided that rather than being hopeless, the lesion warranted further resection, i.e. abdominal perineal resection, or perhaps posterior resection for carcinoma of the anus.

On October 3, 1945, a preliminary colostomy was done. The patient died two weeks later of intestinal obstruction due to a loop of small bowel being kinked at the peritoneal suture line. This was not recognized antemortem.

However, autopsy revealed that there was no further carcinoma in the abdominal cavity. The liver, rectoperitoneal, para-aortic glands, et cetera were all negative. The rectum showed a granular, friable carcinoma about the size of a quarter in the left anterolateral portion of the anal region. It infiltrated about 0.5 cm. in the perianal tissues at this site. Otherwise there were no further extensions. The lesion, from the autopsy findings, was still strictly local and still amenable to wide surgical removal.

Summary

Several clinical histories of patients are detailed. All of them were referred for custodial care in a supposedly hopeless state. In one group it was found possible to resect the lesion. In the other group the lesion was still local at autopsy.

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MSMS

Treatment of Migraine and Related Headaches

The majority of patients affected with severe headaches show signs of metabolic disorder which can be diagnosed by the salt-tolerance test and demonstration of salt and water retention.

The retentional type of headache responds in the large majority of cases to a simple treatment consisting of a high-protein diet with restriction of salt, water, and carbohydrate intake and to medication with ammonium and organic potassium salts. Sedation with a mixture of atropine and phenobarbital is also necessary. Added therapy with endocrine preparations should be considered, if warranted by evidence of endocrine deficiencies.—M. A. Goldzieher, M.D., New York City; New York State J. Med., March 1, 1946.

* * *

Little Joe Genius says—

I see where Eleanor in her My Day says it has been a long fight to put the control of our economic system in the hands of the Government, where it can be administered in the interests of the people as a whole. That fits with her endorsement of compulsory health insurance.

Little Joe Genius says—

I see that Senator Ellender remembers the power OPA took unto itself, and does not relish a repetition in health care.

Editorial

MALPRACTICE THREATS

MALPRACTICE CASES are increasing in number. Several such cases have recently been started against Michigan physicians who unfortunately have no protection in the form of insurance.

For years the Michigan State Medical Society gave such protection to its members, but that was discontinued several years ago because of legal advice. It was found that there are many mediums of securing such coverage and to operate such service would place the society in a tax bracket we did not wish. It seemed better and no hardship for the individual doctor to provide his own insurance. But the individual doctor is forgetful. Too many have allowed their insurance to lapse.

Discharged medical veterans should promptly reinstate their civilian malpractice insurance. Not to do so might be costly; the expense is small, and the benefits are great.

And this advice might well be followed by non-veterans who have been negligent.

COMPARATIVE HEALTH FACTORS AMONG THE STATES

THE HEALTH of a population depends upon many factors such as income, sanitary and medical facilities, culture, social control, climate and special phases of the environment."—From the ninth annual report of the Social Security Board.

An article in the February 1, 1946, number of the *American Sociological Review* has selected and tested statistics as a health index of the States. Michigan with a population of 5,256,106 is 65.7 per cent urban, while the whole United States is 56.5 per cent urban. We have 6 per cent large families*, 4.2 per cent non-white, and 6.3 per cent over sixty-five years of age. We have forty-one per thousand infant deaths, and rank seventeenth in the United States. Deaths from heart disease are 296.8, from tuberculosis are 34.1 and from contagious diseases 2.5.

In the draft we had 26.4 per cent rejected because of physical defects only. The USA rate was 27.1 per cent, and Michigan ranked twenty-second. There were nine states with rejection rates of 40.0 to 46.2. These figures are not accurate, being made from samplings of 20 per cent of all registrants. Approximately 30 per cent of all rejections were for mental defects and deficiency.

In the field of sanitation there are in Michigan 27.2 per cent of dwellings without sewer connections, or needing major repairs. The rate for the USA is 35.5 per cent and we rank twelfth. For defective housing the rate is 14.0 per cent, and the rank, tenth.

By general consent social workers have set up a rate of one doctor per thousand persons, 2,000 to a dentist, and 250 per hospital bed. In Michigan these rates are 826, 1978, and 238, while in the whole United States the rates are 748, 1860, and 283. Michigan has a per capita wealth of $2,676, income of $689, and savings of $133 against USA figures of $2,335, $575, and $156. Michigan ranks first of all the States in expenditures for health and accident insurance, $6.46; New Mexico is $5.28, Nebraska $4.79, California $4.60, Connecticut $4.45, and the USA $2.43. Health insurance started in the United States around 1850 and 40,000,000 people were covered in 1940.

Michigan ranks tenth in economic resources, seventeenth in culture and in 1943 was ninth in Blue Cross hospitalization plans. We are nineteenth in medical facilities.

April 30, 1946, 1,227,569 persons, or 23.3 per cent, had Blue Cross hospitalization in Michigan, and 838,336, or 14.9 per cent, had Michigan Medical Service Coverage.

WAGNER-MURRAY-DINGELL BILL

HEARINGS have been held on this bill and many persons have testified for and against it. The attitude of the Senators holding the "Inquest" has been critical of those doctors and others who were not full supporters of the bill. It has been difficult to secure a chance to testify unless the trend of the opinion to be expressed was favorable. Many doctors of pink leanings, who have favored the bill, have claimed AMA membership, but have differed with the majority opinion of the AMA. These have been encouraged to testify.

To read the evidence as it has been presented

(Turn to Page 930)

*Three or more children under ten years.

The San Francisco Meeting

President's Page

The latter part of June and the first week in July marked the first meetings to be held in two years for many national medical societies, including the American Medical Association.

At the San Francisco meeting, your state society was represented by your duly elected delegates who had previously consulted with the officers and Council concerning policies to follow and matters to present. There were many things for the parent body to do pertaining to present-day medical trends, and it is gratifying to note that it did something very constructive toward reorganizing home office activities, and to activate its public relations policies. These policies are much in keeping with those held by Michigan for quite some time, and it is hoped that this turning to a positive and progressive program will be developed into one that will place the American Medical Association in a position to command the highest respect of the people of this country, and to be recognized as the fountain head of medical leadership.

President, Michigan State Medical Society

(Continued from Page 928)

one would find it difficult to make a just decision. The medical testimony has been unfavorable to the bill except from biased groups, and much other testimony has also been unfavorable, but there have been long lists of non-medical men who have presumed to know how to run the health services of the nation. Most have favored government control, and some (notably Altmeyer) have insisted that the patient has free choice of physician, but admitted that if he exercised that choice for a doctor not registered with the plan he would have to pay the doctor himself. He still insisted that was free choice.

The impression is again getting spread among medical men and their friends that this bill is dead, that it will never survive this hearing to be reported out and acted upon. That is just the attitude the proponents of the bill hope we will take, and then it can suddenly be revived and passed in short order. Happily there is one obstacle to be hurdled. That is the new Taft-Ball-Smith Bill, S-2143. On other pages we are publishing material about the Taft Bill.

TAFT-BALL-SMITH BILL S-2143

WE HAVE LONG BEEN advocating that it is time for the medical profession to advocate some *constructive* measure on the increasingly important subject of National Health Insurance. We HAVE something to offer, and Michigan particularly. We have made Michigan Medical Service and Michigan Hospital Service a force to demonstrate that the individuals in this nation can provide health for themselves if they wish, and without compulsion.

Senator Taft has seen the dangers of compulsory health service in the United States and has attempted to provide a bill that will give us the things necessary to come from government: (1) unification under one department of the numerous health agencies of the federal government; (2) a cabinet position; (3) provision of a method, with federal aid, to care for the low income group, and those who are unable to provide adequately for their own care by the prepayment service method; (4) he provides for certain research, and other services; (5) he does nothing to handicap the doctor. He is left free to practice medicine with the good results attained during the succeeding years of modern medicine. Conditions of practice under this plan will be much better, because services will be provided to the low income group in a manner which we will have helped to formulate.

We have heard some doctors lukewarm to the Taft Bill, claiming it is not complete, admitting it has some good points, but considering it just as a stopgap for the compulsory scheme now being considered. We disagree. We believe that our doctors in all their contacts with the public, with persons interested in health service enough to listen, should boost the Taft Bill. It is a long step toward what we can accept, and will be perfected in the course of study. We have just reread the original Wagner-Murray-Dingell Bill and it is very different from the latest text. We cannot support the Wagner-Murray-Dingell affair, but we can and should give the Taft-Ball-Smith Bill every help and support, making suggestions for its betterment if we so desire, but placing ourselves in position of being FOR something.

MANAGEMENT'S RESPONSIBILITY FOR MEDICAL CARE OF EMPLOYES

THE DEVASTATING and crippling strike recently conducted by John L. Lewis and his coal miners brings this subject to our attention whether we wish or not. It is a subject with dynamite in it, but it is a subject we must face. There is now no alternative. On April 14, 1946, this subject was the topic of the University of Chicago Round Table over NBC. These facts were reported:

For several years an experiment in management providing health care for their employes has been successfully carried out by Hormel Packers. The results have shown the feasibility in certain types of industry, resulting in a greatly improved morale. At Hormel management financed the venture, and controlled it, with some co-operation from the employes. The Union Health Center of the International Ladies Garment Workers Union handles the management of the health service, with financing by the employers, but supervision of the work by the union.

Management in general believes that the workers must have the very best of medical and health care in order to give their best services. All interested parties concede that there are four points of agreement: (1) Full medical and hospital care should be given in all workmen's compensation cases, and all occupational disease cases, this care to be of the best and most competent that can be secured; (2) in distant, isolated, or other

plants where there are insufficient medical facilities, then the responsibility of management is to provide all necessary care; (3) in all instances the recognized confidential patient-physician relationship must be maintained at all times; (4) The industrial physician should be responsible only to the chief executive officer of an organization.

There is honest difference of opinion as to the responsibility of management for general health care other than industrial and occupational. There is no disagreement about the latter. The primary responsibility for care of men and machines, and their efficient operation, is in the hands of management. This is a duty that cannot be shirked if efficiency is to be maintained. But the method of payment and the details of operation are another thing. Some believe in a joint operation, even including joint responsibility for the costs. Others argue that the cost ultimately must and does come from management, because management must either pay the costs or pay the employes enough so that they may meet their own costs.

Voluntary Non-Profit Insurance

Another argument might be that since insurance is a well established American institution, the best way to handle this problem is by prepayment insurance, either non-profit and voluntary, or through commercial avenues with profit accruing to the purveyors of insurance. A third method is now being proposed by government—compulsion.

Workmen are intelligent individuals, and so are their employers, but the intricacies of co-operative, or voluntary, insurance are bewildering. Management might render its best service to its employes and to itself by actuating, and making available to its employes, the advantages, the information and the possibilities of pre-paid insurance for all the health care of the personnel (and their families) of the plants, or establishments.

It seems to us that this last function might well be a very obvious responsibility of management, and one about which there could be no disagreement. The workers are not generally in position to secure such advantages, but management can make the contacts and bring about the opportunity. *Satisfied and happy workmen are a company's greatest asset.* Healthy workmen and workmen's families are happy ones. And individuals who have reached happiness through endeavor, through their own efforts, are stalwart Americans. To have by right of strong right arm is vastly better than to have by right of dole.

Influence of Recent Strikes

This editorial was prepared in the early days of the coal strike, and not used. The settlement of the strike by agreement of government to allow a union to tax production has only made the problem more acute. The coal managers have not accepted. To do so would fix the causes of the next general strikes to include health service funds. Government is not consistent. The administration is advocating the compulsory health measure of Wagner, Murray and Dingell, for all the people, and in this settlement government has set up a plan to parallel their own. There will be a double tax. And this will grow, for all other labor leaders will be compelled to make their demands equal those of the coal workers.

We are still of the opinion that management is the most vitally interested, second to the beneficiary, in this matter of general health insurance. The coal strike settlement has not changed our minds, except it has made these problems assume vastly more weight. These settlements have furthered the conviction that a National Health program is sure to evolve. It may be through employment, rather than federal government. Whatever the outcome, medicine is interested, because we are the ones who must render the services wished. It is our opportunity to help write the plans, to help solve the administrative problems that must be met. We are able, we understand the problems. The laity will be groping for help, and, not knowing, will make irreparable mistakes which we would avoid. We have had the experience during the past six or seven years. That should now be offered in a helpful manner to work out problems too important to allow unskilled solution.

SOLO OR SYMPHONY?

SUCH IS THE TITLE of a booklet published by the Medical Group Practice Council of the Medical Administrative Service, Inc., Kingsley Roberts, M.D., Director.

The booklet of forty-eight pages is in the form of letters from a Captain Walsh who went into the army after four years of private practice, with answers from Dr. Roberts. The Captain asks questions bearing on the practice he will do after leav-

ing the army? Shall he continue in private practice, alone? He has not been entirely happy, primarily because he didn't advise with some older heads, if we properly interpret his letters. However, Dr. Roberts' interpretation is a chance to boost group practice which he describes in all its glowing advantages. He describes the various kinds of group practice, making it include practically every type of practice but the private practice. He describes especially the diagnostic groups, the reference groups and the service groups.

Several types of group practice are described, based on ownership, financing, or type of control. These are illustrated. Advantages of group practice are set forth as more favorable financially for the younger man, in his first few years of practice, not so profitable financially in the middle years, and again more profitable for the older practitioner, who will have the income of the group to depend upon.

We have read the booklet carefully, and are impressed with the tremendous effort being put forth to advance the Group Practice plan. Much money is being spent, and several newly formed committees are working on the subject. Is it a socializing trend? We admit there are many groups, of national and international reputation, whose leaders have enjoyed the greatest honors the medical profession can bestow upon them. But there have also been leaders who arrived at the pinacle through their own outstanding efforts.

We hold no brief for this subject. We merely ask what is the financial backing of the present propaganda? What about the young doctor just returning from military service, who has never practiced medicine, or very briefly? We know many of them who are keenly anxious to practice by themselves. There is no reason they cannot render just as good service to their people as any group.

VETERANS' AFFAIRS

A NEW AND UNTRIED proposal never runs quite smoothly. The care of the veteran in his own home town by his own physician is new. It has never been tried before, and new rules had to be evolved for the proper administration. We have published the methods of procedure, and they have been sent out by the Veterans Administration to the various contact agencies, but things have not been understood.

If a serviceman is ill, or thinks he has a service-connected disability, and if he does not already have a service rating, he, his physician, or some interested person must contact the Veterans Administration, Buehl Building, Detroit, stating the above facts, and asking for an examination. This will be authorized, which authorization will be taken by the veteran to the doctor of the patient's choice. The doctor will make an examination, make a report on a short form, and be reimbursed through the Michigan Medical Service. The doctor will have indicated what treatment is needed, and how many visits per month. Authorization will then be made through Michigan Medical Service. The patient then goes to his doctor for treatment as planned.

If this proceeding is not carried out the program falls down. That is the reason for repetition of instructions. Some of the contact men of the Bureau in the various cities of the state are giving the veteran a slip instructing him to get a statement of his condition from his doctor, with diagnosis, what and how many treatments are needed, and the fact that the doctor is a member of the Michigan State Medical Society. This is not an authorization, and will not carry payment of the doctor, but the veteran thinks it is and does not understand. To him this is official, having come from the Veterans Administration contact man. It takes trouble and time to explain that the contact man has been wrong, and get the patient to start his claim right. If the doctor wishes to get his pay, that must be done, otherwise the veteran must pay for a service that has been promised him.

There have been other complaints that the plan is not working properly. There are certain Service Counsellors representing veterans' societies or other groups, who have advised veterans not to go to certain doctors, have referred them away from the men of their own choice. This has not been well received by the victims, doctors or patients, and has given this service a needless black eye in several instances.

PEDIATRIC SURVEY

THE AMERICAN ACADEMY of Pediatrics has undertaken a nation-wide survey of Child Health Services, to determine what services are available for the prevention of disease and for the general care of children, and to evaluate the quality of such services. If children are to receive the care

that they need in the postwar era, systematic planning to provide that care must be made, and exact data are needed.

The study in Michigan is now being organized, and is being financed by the Michigan State Medical Society, The Michigan Society for Crippled Children and Disabled Adults, Inc., and by generous personal contributions of the Academy members.

Letters have been sent by local pediatricians enclosing a questionnaire. It is with regret that this additional burden is placed on our members, but it is hoped they will realize the importance of this information, and will take immediate care in filling in the necessary data.

It must be emphasized that this is a Survey BY THE DOCTORS of Michigan to evaluate the available child health services. It is of importance that these questionnaires be completed as soon as possible and RETURNED. By doing so the practicing physician has the opportunity to determine the needs of Michigan and thereby determine the best methods to meet these needs.

With 100 per cent response, we can make this another Michigan FIRST.

EARLY POSTOPERATIVE AMBULATION

EARLY AMBULATION following major surgery is rapidly gaining favor with thoughtful surgeons who see the excellent results obtained thereby. In selected cases, the patient is sitting up in bed the day of operation, standing and doing some walking with assistance the next day, with rapid restoration of normal activities thereafter.

Before undertaking this treatment as a routine, two important considerations must be realized. The surgeon must change his technique to embrace the use of interrupted non-absorbable sutures in all layers of closure of wounds. He must also take the extra time and precautions which prevent wound infections, and must be aware of the contraindications to early ambulation. These, briefly, are: prolonged preoperative bed rest, cachexia, cardiac insufficiency, recent coronary occlusion, shock, severe anemia, hemorrhage, or fear of hemorrhage, and the presence or suspected presence of thrombi or emboli. Other contraindications are suppurative conditions such as peritonitis, pancreatitis, cholangitis. Of course, cases of insecure anastomosis, copious tamponade and difficult hernial repairs are not candidates for early ambulation.

The marked decrease in complications such as postoperative pneumonias, atelectasis, infarcts, phlebothrombosis, urinary retention which requires repeated catheterization, abdominal distention, etc., is well worth the application of this new postoperative therapy.

One recent hospital study of over 400 surgical cases thus treated showed some postoperative complication in thirty-two cases as compared to seventy-four such complications in a similar sized group not ambulated. There were no serious wound healing complications, wound disruptions, severe hemorrhages, cases of ileus or deaths in the early ambulation group. Very few patients complain of more pain with this treatment and the improvement in morale is startling. The return to normal of these patients is markedly accelerated and there is a definite economic saving, financial and in hospital hours, to all concerned, the patient, doctor, and nurse.

SHERWOOD B. WINSLOW, M.D.

ON THE RUN

The physician cannot confine himself exclusively to the technological without harming many patients.

* * *

The importance of the diagnosis of deep phlebitis is exactly in reverse ratio to the ease with which it can be made.

* * *

While Hodgkin's disease may invade bone it usually does so after it has been progressive for a year or two.

* * *

Statistically, 50% of cases of myeloma have pathologic fractures sometime during their course.

Selected by W. S. REVENO, M.D.

THE PELVIC FLOOR

(Continued from Page 913)

(a) A blueprint of normal pelvic floor construction.

(b) A series of blueprints of primary and secondary impairments.

(c) A series of blueprints of the different steps to be taken.

(d) A blueprint of the restored condition that is a duplicate of (a) or a working substitute, remembering that an artist cannot paint a picture or an engineer build a bridge that he cannot first visualize.

4753 Broadway (Suite 1018)
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THE 81st ANNUAL SESSION
MICHIGAN STATE MEDICAL SOCIETY

Book-Cadillac Hotel, Detroit, September 22-27, 1946

INFORMATION

Registration, Fifth Floor, Book-Cadillac Hotel, Detroit. No registration fee to MSMS members.

Admission by badge only.

Military men and returned medical officers are especially and cordially invited to the MSMS Annual Session. No registration fee to men and women in military uniform.

Postgraduate Credits given to every member who attends MSMS Annual Session, Wednesday, Thursday, Friday, September 25, 26, 27, 1946.

House of Delegates, MSMS, meets Sunday, Monday and Tuesday, September 22, 23, 24. The scientific assemblies are held Wednesday, Thursday, and Friday, September 25, 26, 27.

Seven General Assemblies—**Ten** Section Meetings—**Nineteen** Discussion Conferences on September 25, 26, 27, all under one roof, Book-Cadillac Hotel, Detroit.

Public Meeting. The Third General Assembly, Wednesday, September 25, 8:30 p.m.—Officers' Night—will be open to the public. Invite your patients and friends to this interesting meeting.

Papers will begin and end on time. This scientific meeting will feature by-the-clock promptness and regularity.

Eighty-two technical exhibits containing much of interest and value. Intermissions to view the exhibits have been arranged. **Please register at every booth.**

County Secretaries Conference, Wednesday, September 25, Washington Room, Book-Cadillac Hotel, 5:30 p.m. A preprandial hour, dinner and an interesting and brief meeting. Will adjourn promptly at 8:30 p.m.

The Michigan Pathological Society will meet in the Statler Hotel, Thursday, September 26 at 3:00 p.m. Guest speaker will be C. F. Geschickter, M.D., of Baltimore.

The Woman's Auxiliary to the Michigan State Medical Society will present an attractive social and business program to which the wife of every MSMS member is cordially invited.

THE PROGRAM

All General Assemblies will be held in the Grand Ballroom, Book-Cadillac Hotel, Detroit

First General Assembly
Wednesday, September 25

Morning

A.M.

9:00 **Edgar V. Allen, M.D., Rochester, Minn.,** Associate Professor of Medicine, University of Minnesota, Medical School. "Intravascular Thrombosis and the clinical use of Anticoagulants."

9:25 **Fred W. Rankin, M.D., Lexington, Ky.,** Clinical Professor of Surgery, University of Louisville. "The Surgical Treatment of Carcinoma of the Colon."

10:35 **Francis E. Senear, M.D., Chicago,** Professor and Head of Dept. of Dermatology, University of Illinois, College of Medicine. "Dermatitis Medicamentosa"

11:00 **Bayard Carter, M.D., Durham, N. Carolina.** Professor of Obstetrics and Gynecology, Duke University School of Medicine. "Premature Separation of Placenta."

Second General Assembly
Wednesday, September 25

Afternoon

P.M.

1:40 **Francis M. Rackemann, M.D., Boston,** Lecturer in Medicine, Harvard Medical School. "New Concepts of the Causes of Asthma."

2:05 **Leo Rigler, M.D., Minneapolis,** Professor of Radiology, University of Minnesota Medical School. "Early Diagnosis of Cancer of the Lung."

3:15 **Louis H. Clerf, M.D., Philadelphia,** Professor of Laryngology and Broncho-Esophagology, Jefferson Medical College. "The Clinical Significance of Hoarseness and Wheezing Respiration."

3:40 **S. Allen Wilkinson, M.D., Boston,** Member of Staff, Dept. of Gastro-Enterology, Lahey Clinic. "Diseases of the Liver and Jaundice."

4:15 Seven Discussion Conferences in Medicine, Surgery, Obstetrics, Dermatology, Radiology, Otolaryngology and General Practice.

Third General Assembly
Wednesday, September 25

Evening—Public Meeting

P.M.

8:30 OFFICERS' NIGHT. Presidential Address and Induction of New President.

Biddle Oration

C. F. Kettering, Vice President in Charge of Research, General Motors Corp. "Industrial Research and Medicine."

THE PROGRAM

Fourth General Assembly
Thursday, September 26

Morning

A.M.

9:00 **Richard B. Cattell, M.D., Boston,** Surgeon to Lahey Clinic, New England Deaconess and New England Baptist Hospitals. "Present Day Management of Ulcerative Colitis."

9:25 **Arthur H. Ruggles, M.D., Providence,** Superintendent, Butler Hospital. "The Development and Use of the Psychiatric Outpatient Department."

10:35 **Francis D. Murphy, M.D., Milwaukee,** Director, Department of Medicine, and Professor of Medicine, Marquette University, School of Medicine. "Hypertensive Heart Disease."

11:00 **Allan M. Butler, M.D., Boston,** Associate Professor of Medicine, Harvard Medical School. "Parenteral Fluid Therapy."

Fifth General Assembly
Thursday, September 26

Afternoon

P.M.

1:40 **George Crile, Jr., M.D., Cleveland,** Member, Surgical Staff, Cleveland Clinic Foundation. "The Present Status of Treatment of Diseases of the Thyroid."

2:05 **Ralph T. Knight, M.D., Minneapolis,** Clinical Professor and Director, Division of Anesthesiology, University of Minnesota. "Present Developments in Combined Anesthesia."

3:15 **Edmund B. Spaeth, M.D., Philadelphia,** Professor of Ophthamology and Vice-Dean for Ophthamology, University of Pennsylvania. "Ocular Fundus, Its Values in Diagnosis and in Prognosis."

3:40 **Nicholson J. Eastman, M.D., Baltimore,** Professor of Obstetrics, Johns Hopkins Hospital. "Episiotomy."

4:15 Seven Discussion Conferences in Medicine, Surgery, Pediatrics, Ophthalmology, Anesthesia, General Practice and Obstetrics.

Evening

State Society Night

10:00 Dancing for MSMS members and their ladies. Grand Ballroom, Book-Cadillac Hotel, Detroit.

THE PROGRAM

Sixth General Assembly
Friday, September 27

Morning

A.M.

9:00 **Emil Novak, M.D., Baltimore,** Asst. Professor of Gynecology, Johns Hopkins Medical School. "Significance and Treatment of Uterine Bleeding at Various Age Periods."

9:25 **T. Grier Miller, M.D., Philadelphia,** Professor of Clinical Medicine, University of Pennsylvania School of Medicine. "Results from the Management of Peptic Ulcer."

10:35 **H. E. Alexander, M.D., New York,** Asst. Professor of Pediatrics, College of Physicians and Surgeons, Columbia University. "Treatment of H. Influenzae Meningitis."

11:00 **Roscoe R. Graham, M.D., Toronto, Canada,** Assistant Professor of Surgery, University of Toronto, Faculty of Medicine. "Abdominal Emergencies in General Practice."

Seventh General Assembly
Friday, September 27

Afternoon

P.M.

1:40 **Charles R. Rein, M.D., New York,** Consultant in Serology, Army Medical School "Recent Advances in the Serodiagnosis of Syphilis."

2:05 **Philip Levine, M.D., Linden, N. J.,** Director, Biological Division, Ortho Research Foundation. "Importance of the Rh Factor in Clinical Medicine."

3:15 **E. H. Rynearson, M.D., M.S., FACP, Rochester, Minnesota,** Associate Professor of Medicine, Mayo Foundation, University of Minnesota. "Clinical Disturbances of the Endocrine Glands."

3:40 **Charles W. Mayo, M.D., Rochester, Minn.,** Associate Professor of Surgery, Mayo Foundation. "Operative Procedures for Carcinoma of the Rectum."

4:15 Five Discussion Conferences in Medicine, Surgery, Gynecology, Pediatrics and Syphilology.

General Assemblies and the Annual Session end at 5:15 p.m.

THE PROGRAM

Section Meetings

Wednesday, September 25, 12:00 noon to 1:30 p.m.

(luncheon meetings)

1. Radiology, Founders Room, Book-Cadillac Hotel
   Leo Rigler, M.D., Minneapolis, "Cholangiography and Biliary Regurgitation"
2. Dermatology, Washington Room, Book-Cadillac Hotel
   Francis E. Senear, M.D., Chicago, "Acute Disseminated Lupus Erythematosus—Its Diagnosis and Treatment."
3. Otolaryngology, Parlors G-H-I, Book-Cadillac Hotel
   Louis H. Clerf, M.D., Philadelphia, "Paralysis of the Larynx"

Thursday, September 26, 12:00 noon to 1:30 p.m.

(luncheon meetings)

4. General Practice, Grand Ballroom, Book-Cadillac Hotel
   Francis D. Murphy, M.D., Milwaukee, "Acute Nephritis"
5. Surgery, Washington Room, Book-Cadillac Hotel
   George Crile, Jr., M.D., Cleveland, "Surgical Diseases of the Pancreas and Lower Biliary Tract"
6. Ophthalmology, Parlors G H I, Book-Cadillac Hotel
   Edmund B. Spaeth, M.D., Philadelphia, "Vertical Component in Lateral Concomitant Strabismus."
7. Anesthesia, Parlor J, Book-Cadillac Hotel
   Ivan B. Taylor, M.D., Professor of Anesthesiology, Wayne University, College of Medicine, Detroit, "Discussion on Spinal Anesthesia"

Friday, September 27, 12:00 noon to 1:30 p.m.

(luncheon meetings)

8. Obstetrics and Gynecology, Washington Room, Book-Cadillac Hotel
   Emil Novak, M.D., Baltimore, "Functioning Tumors of the Ovary."
9. Medicine, Founders Room, Book-Cadillac Hotel
   Jerome W. Conn, M.D., Assoc. Professor of Internal Medicine, University of Michigan Medical School, Ann Arbor, "Functional Hyperinsulinism"
10. Pediatrics, Parlors G H I, Book-Cadillac Hotel
    Philip Levine, M.D., Linden, New Jersey, "The Basis for Specific Therapy of Erythroblastosis Fetalis"

Committee Reports

ANNUAL REPORT OF LEGISLATIVE COMMITTEE, 1945-46

During the year 1946, your Legislative Committee held no meeting.

An extra session of the Michigan Legislature was held early in 1946, but nothing of direct importance or concern to the medical profession was encountered in this session. The daily activities of the Legislature were watched carefully, but only legislation of a general nature was proposed.

The individual members of your Legislative Committee have co-ordinated with the American Medical Association and other national medical groups in recommending contacts with members of the United States Congress on various proposals affecting medicine and public health, and have done what they can in connection with proposals to socialize medicine.

Your Legislative Committee warns that a most determined effort may be made in the 1947 Michigan Legislature to place on the statutes of this state a compulsory state medicine or sickness insurance proposal, and urges that the individual practitioners of medicine cast aside any complacency or defeatist attitude, and assume in its place a militant, alert, and realistic approach to a very dangerous problem facing them.

The Committee wishes to report that, as in the past, it has received prompt and courteous consideration at the hands of our United States Senators and a plurality of our Congressmen from Michigan.

Respectfully submitted,
H. A. Miller, M.D., *Chairman*
R. G. Cook, M.D.
D. L. Finch, M.D.
Nicola Gigante, M.D.
T. K. Gruber, M.D.
W. A. Hyland, M.D.
E. D. King, M.D.
S. L. Loupee, M.D.
G. L. McClellan, M.D. (deceased)
H. L. Morris, M.D.
E. W. Schnoor, M.D.
E. F. Sladek, M.D.
R. V. Walker, M.D.
George Waters, M.D.
A. V. Wenger, M.D.

ANNUAL REPORT OF PROFESSIONAL LIAISON COMMITTEE, 1945-46

The Professional Liaison Committee had no meetings during 1945-46, as no matters or problems within the purview of this Committee's activities were referred to it.

Respectfully submitted,
W. F. Boughner, M.D., *Chairman*
J. A. Dorland, M.D.
R. A. Springer, M.D.

ANNUAL REPORT OF VENEREAL DISEASE CONTROL COMMITTEE, 1945-46

Two meetings of the Venereal Disease Control Committee have been held during the past year. The first meeting was held at the Porter Hotel in Lansing at 2:00 p.m. on Sunday, March 3, 1946. The second meeting was held at the same place and time on Sunday, May 26, 1946.

At the first meeting the problem of serodiagnosis of syphilis with special reference to false positive reactions was discussed. It was decided that a discussion of this subject should be prepared for publication in The Journal of the Michigan State Medical Society.

The problem of the indications for and the most effec-

tive use of penicillin in the treatment of syphilis was next discussed. It was decided that this should also be made the subject for a report to our medical profession through THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY. The preparation of such an article on serologic interpretation was assigned to Doctor Shaffer and the article on "Penicillin Therapy of Syphilis" was assigned to Doctor Curtis.

Doctor Cummings reported that the Laboratory of the Michigan State Health Department was preparing to do Kolmer complement fixation tests on request as well as quantitative Kahn reactions.

Consultants to Doctor DeKleine, State Health Commissioner, for disposition of questionable cases, for whom applications for special dispensation certification for marriage are made, were discussed. A list of consultants was approved to represent their respective communities from the Lower Peninsula.

At the meeting of May 26, the articles of Doctors Shaffer and Curtis were reviewed, amended and approved. It was recommended that they be forwarded to the Editor of THE JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY for publication as feature articles in an early issue. It was also recommended that the State Health Department be contacted to secure reprints of these articles to be circulated to all physicians and health officers in Michigan.

Four physicians from the Upper Peninsula were recommended to be added to the list of consultants for Special Dispensation Certificates for Marriage. The completed list, when approved by The Council, Michigan State Medical Society, was to be forwarded to the State Health Commissioner for notification of appointment.

Respectfully submitted,
L. W. SHAFFER, M.D., *Chairman*
R. S. BREAKEY, M.D.
K. A. ALCORN, M.D.
A. C. CURTIS, M.D.
RUTH HERRICK, M.D.
H. L. KEIM, M.D.
L. M. MCKINLAY, M.D.
E. S. PARMENTER, M.D.

ANNUAL REPORT OF MSMS ETHICS COMMITTEE, 1945-46

Your Ethics Committee begs to report that it has had nothing to do whatever in the last year. This is very gratifying, especially in these times of stress and strain. We have had no complaints whatever.

Respectfully submitted,
H. W. PORTER, M.D., *Chairman*
A. J. BAKER, M.D.
L. O. GEIB, M.D.
L. C. HARVIE, M.D.
G. B. HOOPS, M.D.
E. T. MORDEN, M.D.
D. R. SMITH, M.D.
LEMOYNE SNYDER, M.D.

ANNUAL REPORT OF MENTAL HYGIENE COMMITTEE, 1945-46

The Mental Hygiene Committee had one meeting during the past year.

Only two subjects were referred to the Committee with the following action:

1. The matter referred to this Committee relative to the Veterans' Readjustment Center at Ann Arbor was considered. It is our understanding that this Center will be conducted after the same policy as has been in existence relative to patients who have been admitted to the University Hospital proper, with the addition of being used as a training center for doctors who wish to enter the specialty field of psychiatry.

It is understood that those doctors in attendance will spend one year at the Center and then are obligated to join the staff of a State Hospital for another year for further training. It appears that this plan will contribute materially to the solving of the problem of the shortage of qualified psychiatrists in the State of Michigan.

Your Committee approved to The Council the conduct of the Center as outlined by the Board of Regents.

2. Your Committee approved and so recommended to The Council that the American Epilepsy League of Boston be informed of the approval of the Michigan State Medical Society for distribution to physicians of available literature regarding epilepsy in its various forms.

Respectfully submitted,
H. A. LUCE, M.D., *Chairman*
R. G. BRAIN, M.D.
F. P. CURRIER, M.D.
M. H. HOFFMANN, M.D.
R. A. MORTER, M.D.
H. A. REYE, M.D.
R. W. WAGGONER, M.D.
O. R. YODER, M.D.

ANNUAL REPORT OF MSMS COMMITTEE ON HEART AND DEGERATIVE DISEASES 1945-46

No meetings of the Heart and Degenerative Diseases Committee were held during the year, the activities of the members being confined to promotion of a statewide Rheumatic Fever Control Program.

The present Chairman recommends that the Committee be continued since there are a number of activities of importance to both public and profession yet to be consummated.

Respectfully submitted,
H. H. RIECKER, M.D., *Chairman*
B. B. BUSHONG, M.D.
M. S. CHAMBERS, M.D.
R. A. JOHNSON, M.D.
MARK MARSHALL, M.D.
A. E. VOEGELIN, M.D.

ANNUAL REPORT OF THE MSMS CHILD WELFARE COMMITTEE, 1945-46

The Child Welfare Committee of the Michigan State Medical Society has had one meeting this year at which time three problems were discussed:

1. Infectious or epidemic diarrhoea in children both in the newborn period and later. The Committee felt that the problem was a joint one with the Maternal Health Committee and voted to invite that Committee, along with Dr. Cummings of the State Department of Health Laboratories, to study jointly the situation and bring back suggestions as to etiology, management and therapy. The Maternal Health Committee has appointed Ward F. Seeley, M.D. and Harold Henderson, M.D.; Dr. G. D. Cummings has accepted appointment and the Child Health Committee representatives are Rockwell Kempton, M.D., and Campbell Harvey, M.D.

2. Immunization problems. It was felt that sufficient data had not accumulated to justify any changes in the present schedules as are now being distributed by the Department of Health.

3. Study of Child Health Services. After full discussion the Committee voted to request The Council's permission to associate itself with the Survey of Child Health Services as being conducted by the American Academy of Pediatrics. This request was granted by The Council and $1,000 was made available to help defray the expenses of this Survey in Michigan. In brief, this is a Survey started by the Academy of Pediatrics directed at obtaining factual data concerning the facilities for child health throughout the nation. It begins with educational facilities in our universities and colleges, and includes hospital training for interns and residents as well as facilities for the direct care of chil-

dren. It attempts to find out the quality and quantity of care rendered by physicians and the various public health facilities available in each community. It really is a quantitative and qualitative evaluation of the services available to children, conducted by physicians and for the benefit of all. The idea could have started in Michigan, and as a matter of fact the seeds may have been sown here, for the enabling motion was made by the Academy in St. Louis in November 1944 after the Pediatricians became thoroughly aware of the implication in the EMIC program.

The Survey is in detail and will take about six months to complete. It has been estimated that about 45,000 pieces of mail will go out of the State Chairman's office.

The Committee wishes to express its appreciation to The Council for allowing our participation in this activity.

Respectfully submitted,
FRANK VAN SCHOICK, M.D., *Chairman*
R. M. KEMPTON, M.D.
MOSES COOPERSTOCK, M.D.
CARLETON DEAN, M.D.
CAMPBELL HARVEY, M.D.
J. L. LAW, M.D.
CLARICE MCDOUGALL, M.D.
A. L. RICHARDSON, M.D.
L. P. SONDA, M.D.

ANNUAL REPORT OF SPECIAL COMMITTEE ON RADIO, 1945-46

Your Special Committee on Radio has held ten meetings and spent many hours on the radio program.

In an effort to improve the program and to meet the then current criticisms of members of the Council and others, your committee made some drastic changes as of March 1, 1946. These changes ware approved by the Executive Committee of the Council. The entire format of the program was changed, and transcribed music was substituted for the live talent previously used. The contract with WJR was terminated and arrangements were made for the new program to be broadcast over WXYZ in Detroit and over the Michigan network throughout the state.

Whether or not these changes were wise is problematical. Criticisms have continued. Judged by a survey made in Detroit May 21, 1946, the popularity of this program had dropped to 2.7 as compared with 9.6 for the previous program. This survey does not take into account the out-state listening audience. Both surveys were made by Commercial Services Incorporated.

The future of the radio program is a matter to be determined by the House of Delegates.

Respectfully submitted,
C. L. CANDLER, M.D., *Chairman*
A. S. BRUNK, M.D.
P. L. LEDWIDGE, M.D.

ANNUAL REPORT OF PUBLIC RELATIONS COMMITTEE 1945-46

The program of this Committee was planned, not as a complete entity, but as a groundwork for a more comprehensive extension of public relations activities by the State Society, by the Public Relations Counselor, and on a local level by the county society. Part of the program is aimed on an institutional level for long term effect; part is more direct for immediate effect.

In formulating a public relations policy and program, the Committee had the advice of two Past Presidents, Dr. Keyport and Dr. Brunk; and of President Morrish; and of Speaker Ledwidge, and of several members of The Council who devoted much time and gave valuable aid.

Various means of improving our relations with the public were investigated. A weekly scientific newspaper column was ratified, set up, then cancelled in favor of more direct means of advertising. The Michigan Health Council, the Legislative Committee, the Committee on the Development of Literature of the MSMS, all contributed to the 1945-46 Public Relations program.

As the opening move, a public relations conference was held in Lansing attended by Public Relations Committee Chairmen from County Societies and by other doctors interested in actively working in the public relations program. Instructions, coaching, ideas, and individual counseling were given these men and they have since performed good service in carrying the program on in their respective counties.

The following fields were covered as part of the public relations work:

1. The Public platform.—To stimulate better representation, and more representation of the medical profession on the platform before lay groups, a speakers' bureau was formed; county speakers' bureaus were appointed by county society presidents. Many speaking engagements were arranged by these bureaus. A speakers' kit, containing information on current legislation and its implications, was sent to each member of the speakers' organization. At the February 21 conference, staged in Lansing, this material was given a thorough demonstration as to manner of presentation and preparation. This committee feels that this field offers great potentialities, with stress on the necessity of each county society operating its own bureau, with the county society secretary making speaking engagements and the members of the speakers' bureau filling them, particularly before small lay groups, such as P.T.A.s, Women's Organizations, and Service Groups.

2. Newspaper Advertising.—This field of public relations was considered valuable, although hitherto unused by the MSMS. It was felt that advertising, judiciously placed, would result not only in value received from the ads themselves, but also in the promotion of better relations with the press as a whole. Funds this year did not permit an extensive program. However, a series of twelve ads was prepared in the executive office with art work and layouts done through the Michigan Health Council. The first ad was run in some eighty newspapers of the state and was paid for by the MSMS, but placed through the county societies and carried their name. Succeeding ads were sent to the county society secretaries, and the problem of paying for them allocated to the county societies. In some counties this cost was met from the society treasury; in some, individual physicians and dentists paid for individual ads; in some, the allied professions and various businessmen participated in the cost. With a relatively small sum spent by the MSMS from the public relations budget, a total sum of ten times that amount in newspaper advertising will have been spent for the insertion of these ads in weekly and daily newspapers before Jan. 1, 1947. It is difficult to estimate the value of these ads, just as it is with any type of advertising, but it is felt by this committee that this medium should be studied, that it will have definite benefits in improving public relations through a better press and that if the studies indicate, its use should be extended in 1946-47.

3. Schools.—A series of fifteen-minute programs on recording discs with accompanying health charts, is being prepared for presentation through the public schools. There will be at least three programs which will be presented in the majority of the schools throughout the State. Other health organizations have been contacted and may join us in this endeavor to reach the school children through this modern and effective means. This program will be used beginning in September with the opening of the new school year.

4. Radio.—Under the direction of the Special Committee on Radio, a program was carried on. Report of this committee appears separately.

5. Pamphlets.—Two committees worked on the pamphlet program. One of these was the Committee on the Development of Literature, the other was the Committee on the Distribution of Literature. The first committee has prepared and approved six pamphlets for distribution to doctors and to the laity. The first two pamphlets printed were the pamphlets of the "Little Joe Genius" series. One hundred thousand of each of these were printed and the second committee had these placed in the various doctors' waiting rooms throughout the state by first distributing them to the county secretaries. These were also distributed to hospitals for their waiting rooms through the efforts of the Michigan Health Council. Other pamphlets of this series have been written and are being prepared for distribution. The other pamphlets were prepared, one for distribution to the doctors for their own consumption, and the others to the doctors for redistribution to laity of a professional standard. A pamphlet, the first in a series of six to be prepared, printed and paid for by the MHS, MMS, and the Michigan Health Council, has been written and approved by these committees.

6. Co-ordination of All Public Relations in the State.—It was recognized in the first meeting of the committee that no comprehensive program could be carried out singlehandedly by the thirteen members of this committee. Each county society president was therefore encouraged to appoint a public relations committee in his county society to supervise: (1) local public relations. (2) local newspaper advertising. (3) local activities of the county speakers' bureau. Some county society presidents responded at once; some took no action. There were thirty-three county societies' public relations committees functioning on June 1, 1946, and seventeen speakers' bureaus operating.

7. Other 1946 Public Relations Activities.—Inter-professional liaison meetings of doctors of medicine, doctors of dental surgery, pharmacists and other allied professions were held to discuss questions of paramount importance affecting all.

Various locally sponsored radio broadcasts stressing prepayment health insurance on a voluntary basis were made under the aegis of businessmen with the State Society supplying information and radio commercials.

The newspapers of the state have been sent news releases on matters pertaining to the medical profession and to political medicine, which were printed in newspapers throughout the State.

A propaganda effort is currently being made featuring the IDWTGTRMB Club. This effort may extend not only statewide among the doctors, but also among the businessmen and doctors throughout the United States. It consists of the organization of a club whose purpose is to feature the thought which is embodied in its name, the I Don't Want The Government To Run My Business Club, and carried with it the message of opposition to political medicine.

Posters consisting of blow-ups of the ads prepared for the newspapers have been sent to doctors throughout the State for them to place in public places. These have also been sent to various other organizations with the request that they be posted.

In connection with the work of the Public Relations Committee, Mr. Hugh Brenneman, MSMS Public Relations Counsel, has implemented the decisions of the Committee in the various fields in which it has entered.

Recommendations for 1946-47

This committee recommends:

1. That each Councilor District be represented on the membership of this committee.

2. That each county society president select a dynamic public relations committee to foster and stimulate effective use of the public relations media; to call to the attention of the society, means of improving the personal patient-physician relationship and to relay recommendations of the county society to the state society of ways and means in which the state society can aid them in their local problems and also to advise the state committee with constructive criticism of the state program. Such reaction *from the membership* is felt to be of utmost importance for successful public relations. The promptness of such criticism enhances its value.

3. That county societies issuing monthly bulletins devote space in each issue to public relations plans and problems.

4. That the special assessment of twenty-five dollars for 1945-46 for public relations be repeated or increased in 1946-47 to provide for continuance and expansion of this important and previously neglected field.

Respectfully submitted,
J. S. DeTar, M.D., *Chairman*
C. L. Candler, M.D., *Vice Chairman*
A. S. Brunk, M.D.
C. R. Keyport, M.D.
C. L. Weston, M.D.
N. J. Frenn, M.D.
L. T. Henderson, M.D.
W. J. Herrington, M.D.
S. W. Insley, M.D.
P. L. Ledwidge, M.D.
J. J. McCann, M.D.
G. B. Saltonstall, M.D.
G. A. Zindler, M.D.

ANNUAL REPORT OF IODIZED SALT COMMITTEE, 1945-46

The committee did not have a formal meeting during the year.

However, we did send a scout, Dr. Brock Brush, to represent us at the meeting of the National Committee on January 23, 1946, in Cleveland. That meeting was presided over by its chairman, Dr. Haven Emerson. While Dr. Miner was still chairman of our state committee, we had a meeting in Detroit with the National Committee at the Detroit Club. It was agreed at that time by our State Committee, as well as by the National Committee, that there can be no doubt whatsoever of the great need of iodine in the diet for people living in the endemic goitre areas, such as around the Great Lakes.

Also, there was no disagreement as to the dosage of iodine to meet minimal requirements. There was no question of any harm resulting from the amount of iodine now placed in our table salt. While Dr. Cowie was still chairman of our State Committee, we investigated every case which was suspected of having been harmed by iodized salt reported in this state, and Dr. Cowie never found the slightest evidence that anyone has been harmed by this amount of iodine.

We know that under the Federal Pure Food Laws, we cannot use the iodine in the salt without so labeling the salt. Therefore, our Michigan Committee has in the past, as I believe they do today, felt that we must co-operate in every way with the National Committee on goitre prevention in establishing a national scheme or law for making legal the use of iodine in salt throughout the United States.

The following two paragraphs are from Dr. Brush's report of the National Committee meeting in Cleveland:

"The meeting of the National Committee on Goiter Prevention was held in Cleveland on January 23, 1946. The purpose of this meeting was to prevail on the Federal authorities to some way establish the use of iodized salt throughout the United States. The meeting was represented by the American Medical Association, the American Public Health Association, the Federal Public Health, and the Federal Department of Pure Foods and Drugs, and the salt companies.

"The morning session was composed of talks by Dr. Kimball about his work on goiter prevention, and by Dr. George Curtis of Columbus, Ohio, on his work on

iodine requirements, and we reported on our experience in Michigan. In the afternoon, steps by which federal legislation to guarantee the use of iodized salt throughout the United States were discussed, and several resolutions adopted. A full report of this meeting will appear in the *Journal of the American Public Health Association* in the near future."

Dr. Brush and I have during the past few years been preparing a follow-up report on my paper of twenty years ago on the Reduction of Thyroid Operation in Seven Large Hospitals in Southern Michigan following the Introduction of Iodized Salt. This will be published shortly.

Respectfully submitted,
R. D. McClure, M.D., *Chairman*
L. M. Bogart, M.D.
L. W. Gerstner, M.D.
D. E. Lichty, M.D.
R. J. Moehlig, M.D.

ANNUAL REPORT OF COMMITTEE ON TUBERCULOSIS CONTROL, 1945-46

1. The committee regrets the loss of its Chairman, Dr. John B. Barnwell, who assumed the Office of Director of Tuberculosis of the Veterans Administration in January of this year. The committee congratulates the Veterans Administration for their selection of so able a physician in the field of tuberculosis.

2. In a special session of the Michigan Legislature, the legislature demonstrated its continued interest in the control of tuberculosis. The sum of $500,000 was appropriated for a new State Sanatorium at Houghton. The committee has previously urged the need of a new institution adequate for the care of tuberculosis in this particular area. The legislature also increased State subsidy to certain counties carrying large hospital loads in relation to their assessed valuation. Under this new Act, counties will receive subsidy up to four dollars per day where the hospital load for tuberculosis exceeds twenty hospital days per $100,000 of assessed valuation.

This Act affects, principally, counties in the Upper Peninsula and the northern tier of counties in the lower peninsula. The total cost to the state is small in comparison to the total subsidy, but this money is essential to these counties if they are to care adequately for their tuberculosis problem.

3. During the past year a number of Health Agencies in the Sanatoria of Michigan profited through federal grants set up to aid in the fight on tuberculosis. These grants will become increasingly helpful in augmenting services chiefly in the fields of case finding and rehabilitation.

4. Tuberculosis among discharged veterans is already becoming a problem. X-ray examination at separation centers are screening out a large number of active cases. Many of these active cases are finding their way back into our local communities, where so often they become a serious public health menace.

Cash benefits for our tuberculous are, as of this date, set up on such a basis as to discourage a large percentage of these veterans in seeking hospital care.

The physicians of our state could do much to educate and encourage these veterans as to the proper management of their disease.

5. In connection with x-ray case finding programs throughout the state, it is urged that all doctors will encourage these surveys and help organize them in their own territory.

Respectfully submitted,
J. W. Towey, M.D., *Chairman*
J. L. Egle, M.D.
L. E. Holly, M.D.
W. L. Howard, M.D.
W. B. Howes, M.D.
H. G. Huntington, M.D.
V. C. Johnson, M.D.
J. D. Littig, M.D.
E. J. O'Brien, M.D.

ANNUAL REPORT OF SCIENTIFIC RADIO COMMITTEE—1945-46

The Scientific Radio Program is sponsored by the Michigan State Medical Society and the University of Michigan continued for the year 1945-46 very much on the same schedule as before with a total of forty-two talks being broadcast from October, 1945, through July, 1946. As in the past, WJR has allocated the time from 11:15 to 11:30 o'clock P.M. every Thursday evening for this program and this was given without pay. Speakers were obtained principally from the University of Michigan Medical School faculty, but various talks were given by members of the profession in different parts of the State. The subject matter, as well as the contents of material presented, was discussed by both the Preventive Medicine Committee and the Special Radio Committee. Suggestions were made for broadcasting the subject matter, but in general it was agreed that the radio talks were being well received and should be continued.

Respectfully submitted,
H. M. Pollard, M.D., *Chairman*
J. H. McMillin, M.D.
E. W. Meredith, M.D.
F. R. Reed, M.D.
G. M. Waldie, M.D.
F. A. Weiser, M.D.
L. J. Morand, M.D.

ANNUAL REPORT OF THE COMMITTEE ON INDUSTRIAL HEALTH, 1945-46

Due to conflicting dates with other meetings, the annual meeting sponsored by the Committee on Industrial Health of the Michigan State Medical Society was not held in April of this year as it has been for the past three years.

In order to co-operate with local medical societies, a new type of meeting has been inaugurated. The first in a series of this type of meeting was held in Bay City on June 5, 1946. The meeting was sponsored by the Committee on Industrial Health of the Michigan State Medical Society in co-operation with the District Medical Society consisting of Bay, Arenac and Iosco counties. The Bay City Chevrolet Division of the General Motors Corporation served as host. Those attending were guests of the Chevrolet management at a social hour and banquet held at the Wenonah Hotel following the plant tour. The program consisted of a few short talks and the presentation of the General Motors' film entitled "Doctor in Industry." This is an excellent film depicting the development and scope of industrial medicine prior to the first World War to the present time. The running time of the film is fifty-five minutes. The attendance was fifty-seven, or approximately eighty per cent of the membership of the medical society. During the plant tour the doctors were divided into groups of five. A plant representative accompanied each group, pointing out the various production methods and the means used to control the various types of occupational health hazards. The entire group was very pleased and expressed a desire for the continuation of this type of meeting.

Plans are now being made to hold similar meetings in Flint, Grand Rapids, Lansing, Pontiac and Saginaw. The purpose of these meetings is to create a more thorough knowledge of the problems of industrial medicine and to bring about a better understanding between the industrial physician and private practitioners in their mutual problems. The plant visits, other than being very interesting from a production viewpoint, have the added advantage of showing and explaining the various

preventive measures that are taken by industry to safeguard the health of its employes.

Respectfully submitted,
K. E. Markuson, M.D., *Chairman*
H. H. Gay, M.D., *Vice Chairman*
A. L. Brooks, M.D.
W. P. Chester, M.D.
Henry Cook, M.D.
W. A. Dawson, M.D.
W. B. Harm, M.D.
J. E. Livesay, M.D.
F. T. McCormick, M.D.
C. D. Selby, M.D.
H. T. Sethney, M.D.
E. C. Sites, M.D.
F. B. Williamson, M.D.

ANNUAL REPORT OF COMMITTEE ON NURSES TRAINING SCHOOLS, 1945-46

The Committee held no meetings during the past year.

The main objective of the Committee, that more nursing service, especially in the smaller hospitals, be made available, still is to be attained. We recommend the Committee be continued and it is hoped some tangible accomplishments may be made this coming year.

Respectfully submitted,
E. A. Oakes, M.D., *Chairman*
A. L. Arnold, Jr., M.D.
C. G. Clippert, M.D.
A. E. Stickley, M.D.
D. W. Thorup, M.D.

ANNUAL REPORT OF MICHIGAN FOUNDATION COMMITTEE, 1945-46

The Committee was called together in Lansing, February 6, 1946, with the Board of Trustees of the Foundation. The principal business confronting the Committee concerned the furtherance of the creation of a substantial fund and methods required to accomplish this. Discussion led to conclusions to utilize the organizations already formed and to make new appeals to them. The Committee agreed upon the permanency of the funds with broad aims for the future and upon a policy to keep the principal of the funds intact and to use only the income from the funds for needed expenditures except when a donor might explicitly direct otherwise.

The need for a statewide campaign to interest donors of gifts of $1,000 or more was met by suggesting that the Board of Trustees of the Foundation request the Chairman of the MSMS Council to urge the individual Councilors of MSMS to make direct contacts or to make appointments in each county district for the purpose of arousing interest among Doctors of Medicine to become Founders of the Michigan Foundation for Medical and Health Education. The President of the Foundation was also requested to approach those already in the Founder's group to arouse interest among their friends who are able to become Founders.

The need of a statewide campaign for gifts of less than $1,000 was met by appealing again to the already formed large statewide committee consisting of all members of the MSMS House of Delegates, to all Presidents and to all Secretaries of every county medical society in the State, and that this Committee, collectively and as individuals, renew its activities as sponsors and solicit gifts for the Foundation.

A mass of material for a proposed brochure setting forth the history of events which had led to the creation of the Michigan Foundation was presented by the Chairman of the Committee and the President of the Foundation. This material had been collected and formulated in an effort to disclose clearly that the work and purposes of the Foundation were the culmination of many activities and developments of and by the Michigan State Medical Society. The desirability of employing professionals for the editing and styling of the brochure was generally regarded as appropriate and necessary.

Tangible projects and other ideas for the brochure were requested to be returned by letter to the President of the Foundation as material from which to formulate the brochure.

The Committee is certain that the growth and development of funds for the Foundation are just as dependent upon the active interest of individuals, committees, and officers of the Michigan State Medical Society as is the concurrence in the projects to be adopted and sponsored. A whole-hearted and complete backing of the Foundation must be conspicuously manifest to whet interest and enthusiasm for large support outside the "Profession."

We are greatly saddened by the death of a member of our Committee, one who was also a member of the Board of Trustees of the Foundation. He had also served on the Committee which organized the Foundation. His experience and wisdom made him a valued member and his counsel was a great influence. Doctor Rollin H. Stevens was important in the Michigan Foundation for Medical and Health Education.

Respectfully submitted,
E. I. Carr, M.D., *Chairman*
J. D. Bruce, M.D.
A. S. Brunk, M.D.
B. R. Corbus, M.D.
C. V. Costello, M.D.
L. J. Hirschman, M.D.
R. L. Mustard, M.D.
Lawrence Reynolds, M.D.
J. M. Robb, M.D.

ANNUAL REPORT OF MEDICAL LEGAL COMMITTEE, 1945-46

No meeting of the Medical Legal Committee was held during the past year. For several years now, this Committee has acted in an advisory capacity only and most of its activities are carried on by correspondence with the Executive Secretary of the Michigan State Medical Society.

During the past year, the Chairman of the Committee has consulted personally, by telephone, or by letter, with physicians who have been threatened with malpractice suits. We have also been consulted about the various types of insurance and the amount of coverage deemed advisable.

At this time it seems to be imperative that this Committee urge each and every member to check over his present policy in order to determine whether or not he is sufficiently covered in the event a suit is brought against him. If he owns or operates an x-ray machine either for diagnosis or therapy or both; if he owns or rents radium; has employed an assistant; entered into a partnership or has taken a position as an assistant, he should not assume that he is fully covered. It is also urged that those members not having any insurance avail themselves of such protection at this time.

In the Committee report of 1944-45, attention was called to points considered important in malpractice prophylaxis and these will not be reiterated at this time. However, the past year has shown that malpractice insurance rates have risen in some states due to the fact that the increasing number of suits has raised the cost to the companies for such protection.

In order that rates may not be increased in Michigan, it is essential that all physicians keep careful records, avoid counter suits against unpaid bills, and keep in mind that each dissatisfied patient is a potential suit.

In order that the officers of the Society have an overall knowledge of the malpractice situation in this State, it is requested that each physician threatened with a suit communicate at once with the Executive Secretary or the Chairman of the Medical Legal Committee and

notify them if and when the suit was dropped, settled or brought into court.

Respectfully submitted,
S. W. Donaldson, M.D., *Chairman*
F. A. Mercer, M.D.
W. B. Mitchell, M.D.
W. J. Stapleton, Jr., M.D.

ANNUAL REPORT OF BEAUMONT MEMORIAL COMMITTEE, 1945-46

Since the purchase of the Early House by Parke-Davis and Company and their generous presentation of it to the State Park Commission, the main objective of our Committee has been attained. On behalf of the Committee, I have written to the Park Commission telling them of our interest in the Early House and offering to aid them in any possible way by consultation or advice.

Now that the main objectives of the Committee have been met, we recommend it be retired.

Respectfully submitted,
F. A. Coller, M.D., *Chairman*
A. W. McDonald, M.D.
F. C. Kidner, M.D.
A. W. Lescohier, M.D.
H. C. Mayne, M.D.

ANNUAL REPORT OF MATERNAL HEALTH COMMITTEE, 1945-46

The Maternal Health Committee, during the past year, has made further studies concerning the planned program for a maternal mortality study throughout the state, and we expect, in the near future, to make known the complete plan.

A sub-committee, consisting of Doctors Harold Henderson and W. F. Seeley, has been appointed to work with the Child Welfare Committee on the problem of infant diarrhea.

Respectfully submitted,
A. E. Catherwood, M.D., *Chairman*
Harold Henderson, M.D.
W. G. Hoebeke, M.D.
S. T. Lowe, M.D.
W. F. Seeley, M.D.
P. E. Sutton, M.D.
A. M. Campbell, M.D., *(Advisor)*

ANNUAL REPORT OF PREVENTIVE MEDICINE COMMITTEE—1945-46

With the trend of activities away from the makeshift of wartime, the medical profession at least has headed towards more stable long-range objectives. Your Preventive Medicine Committee and its advisory sections have accordingly been called upon to deal both with problems arising out of war conditions and those that have necessarily been tabled for the past several years.

One of the most urgent questions demanding an answer has been that of falsely positive serology, accentuated by malaria, infectious diseases and immunization procedures. The Venereal Disease Control Committee has conducted an extensive investigation of this problem and the results of its efforts are even now becoming manifest in the increased facilities being made available for more accurate and informative serologic procedures.

Development of a system for following up the 5,000 to 7,000 army induction system rejections for heart disease has been delegated to the Rheumatic Fever Control Committee which, with the co-operation of the State Health Department, will soon have its nine centers at work on this problem in their individual districts.

This year's conference on Industrial Health was passed up mainly because of the epidemic of strike-illness which was outside of the medical domain. However, it is planned to resume these worth-while sessions as soon as opportunity permits.

The Iodized Salt Committee has again taken up the cudgels in behalf of a more widespread use of iodized salt. It seems that conflicting opinion on the part of government agencies and manufacturers as to the proper and definitive labeling, and a lagging interest on the part of the public, has reduced the use of iodized table salt by one-half—a shameful neglect of a highly beneficial preventive measure. The Committee is attacking this problem vigorously and we hope soon to see an upward trend in the consumption of iodized salt.

The Committee on Mental Hygiene is involved in the establishment of veterans' readjustment centers. The Child Welfare Committee is investigating the problem of infectious enteritis. It is also aiding the conduct of the statewide survey sponsored by the American Academy of Pediatrics. The Cancer Control Committee is following out its previously laid plans for better education in the detection and treatment of cancer. The Scientific Radio Committee has completed a comprehensive educational program of high calibre which has been well received by a large audience.

In all of these endeavors the full co-operation of the State Health Department under Commissioner Dr. William DeKleine has been constantly available and ever helpful.

Respectfully submitted,
W. S. Reveno, M.D., *Chairman*
A. E. Catherwood, M.D.
B. R. Corbus, M.D.
H. H. Cummings, M.D.
William DeKleine, M.D.
W. A. Hyland, M.D.
W. A. LeMire, M.D.
H. A. Luce, M.D.
K. E. Markuson, M.D.
H. M. Pollard, M.D.
H. H. Riecker, M.D.
L. W. Shaffer, M.D.
J. W. Towey, M.D.
Frank Van Schoick, M.D.

ANNUAL REPORT OF JOINT COMMITTEE WITH STATE BAR OF MICHIGAN ON VENEREAL DISEASE CONTROL, 1945-46

There have been no formal meetings of this Committee during the year prior to the necessary submission of this report. A meeting is anticipated in August, 1946, concerning which an amended report will be given at the annual meeting of the House of Delegates. Informal discussions concerning the unsettled suit against Dr. L. W. Shaffer and the Detroit City Health Department have been held. The nature of this suit is as published in the last annual report and the importance of the nature of the decision cannot be underestimated in view of the establishment of legal precedent with regard to the examination of reported sources of infection or contacts. An adverse decision would go far to nullify the many advances made from an epidemiologic view. It has been reported that the Corporation Counsel of the City of Detroit has appeared apathetic as regards this matter. It is the purpose of the Committee to meet with the members of the Bar Association later this summer in order to stimulate legal feeling and opinion in this matter. It has been felt that the matter is one of public health importance and that the Health Department of the City of Detroit should carry the matter to higher courts in case of an adverse decision.

Respectfully submitted,
R. S. Breakey, M.D., *Chairman*
L. W. Shaffer, M.D.
H. L. Keim, M.D.

— Technical Exhibits —

Abbott Laboratories **Booth No. 35**
North Chicago, Illinois

Mr. E. B. Webb and other Abbott representatives will be glad to discuss with you the war-born and newer products on display.
Amethone, the new urinary antispasmodic, Thiouracil (Abbott), for the preoperative preparation of Thyrotoxic patients, Tridione, of value in Epilepsy, and other new items merit your attention.

SO! BE SURE TO VISIT BOOTH 35

A. S. Aloe Company **Booth No. 15**
St. Louis, Missouri

The A. S. Aloe Company in Booth 15, is exhibiting a small cross section of its complete line of surgical, physio-therapy and laboratory equipment. Our representative, Mr. T. T. Boufford, is in charge of the booth.

Ames Company, Inc. **Booth No. 22**
Elkhart, Indiana

Ames Company, Inc. and its Reidel—de Haen Division cordially invite you to Booth No. 22 where modern test methods for urine-sugar, albumin, acetone and occult blood will be demonstrated; and our representatives will be glad to discuss the wide therapeutic advantages of the original hydro-choleretic, Decholin.

The Baker Laboratories **Booth No. 9**
Cleveland, Ohio

In the Baker exhibit you will see a line of infant foods that incorporates the newer trends and more recent thinking in infant nutrition. Both Baker's Modified Milk and Melcose are complete milk formulas, and completely prepared. Melodex (maltose and dextrin) is an economical carbohydrate in dry form and is made especially for use in preparing evaporated or fresh milk formulas in the home.

Bard-Parker Company, Inc. **Booth No. 31**
Danbury, Connecticut

Products to be displayed: Bard-Parker Rib-Back surgical blades; Surgical knife handles; Long handles for deep surgery; Bard-Parker Germicide; Instrument containers; Transfer forceps; Hematological case for obtaining bedside blood samples.

Barry Allergy Laboratories, Inc. **Booth No. 55**
Detroit, Michigan

Welcome Again MSMS to our Exhibit. We are proud to present new items in Sterile Injectable Solutions in Ampuls and Vials. New diagnostic scratch and intra-dermal sets with treatment service. Special allergists supplies. Scientifically organized Allergy Service. Hay Fever and Poison Ivy Sumac Sets. Pollen-Paks. Refined Protiens and Allergenic Extracts.

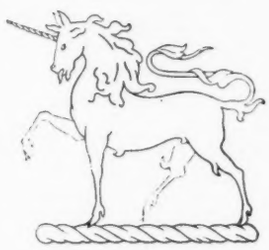
Becton, Dickinson & Company **Booth No. 34**
Ruthterford, New Jersey

The complete line of Vacutainer equipment, including all sizes of tubes available, will be the leading feature at Becton, Dickinson's booth. Their representatives, Mr. C. H. Yocum, Mr. V. R. Littlefield, and Mr. T. W. Starling, will demonstrate this new method of taking blood specimens for all purposes. In addition, hypodermic equipment, including recently developed outfits for continuous caudal and spinal anesthesia, will be displayed.

The Borden Company **Booth No. 32**
New York, New York

Spend a few minutes with Borden at Booth No. 32 . . . refresh your memory on our Prescription Products. Meet the new concentrated Biolac; New Improved Dryco with its formula flexibility; Mull-Soy for your milk-allergic patients; powdered whole milk Klim; the improved milk sugar, Beta Lactose; and the Merrell-Soule Protein and Lactic Acid Milks. Borden men are pleasant men!

Burroughs Wellcome & Co. (U.S.A.) Inc. **Booth No. 26**
New York, New York



BURROUGHS WELLCOME & CO., (U.S.A.) INC., NEW YORK, cordially invite physicians to their exhibit of a representative group of fine pharmaceuticals and chemicals. Of particular interest are GLOBIN INSULIN, a new advance in diabetic control; DIGOXIN, a pure, stable, crystalline glycoside of Digitalis lanata, combining constant, uniform potency with rapidity of action; and "DEXIN" High Dextrin Carbohydrate, the milk modifier in which the non-fermentable portion predominates; and "LUBAFAX" Brand Surgical Lubricant, one of our latest preparations.

Camel Cigarettes **Booth No. 67**
New York, New York

CAMEL Cigarettes will exhibit a large detailed photograph showing the calculated absorption of nicotine from cigarette smoke in the human respiratory tract. Representatives will be on hand to discuss any phase of the physiological effects of smoking.

Cameron Heartometer Company **Booth No. 14**
Chicago, Illinois

THE CAMERON HEARTOMETER COMPANY is showing the improved Heartometer, a scientific precision instrument for accurately recording systolic and diastolic blood pressure. It also furnishes a permanent graphic record of the pulse rate, the nervous functioning of the heart, the myocardial response, as well as the functioning of the valves. The Heartometer clearly reveals heart disturbances in both early and advanced stages and is of great value in checking the progress of medication and treatments.

Cameron Surgical Specialty Company **Booth No. 53**
Chicago, Illinois

CAMERON SURGICAL SPECIALTY COMPANY See the new Cameron Electro-Surgical Units, Flexible Gastroscopes, Coagulair-Sigmoidoscope, Electro-Diagnostosets, Bronchoscopes — Esophagoscopes — Laryngoscopes, Mirrolite, Binocular Prism Loupe, Magniscope and other specialties developed for your postwar diagnosis, treatment and surgery. All products available for prompt delivery.

Carnation Company **Booth No. 39**
Milwaukee, Wisconsin

You are invited to visit the Carnation Company booth, No. 39, where you will see an attractive display presenting some interesting information on the various uses of Carnation Vitamin D Evaporated Milk for infant feeding, child feeding, and general diet pur-

poses. The method by which Carnation Milk is generously fortified with Vitamin D—400 U.S.P. Units per reconstituted quart—will be explained. Valuable literature will also be available for distribution.

Ciba Pharmaceutical Products, Inc. **Booth No. 20**
Summit, New Jersey

Ciba invites you to visit its display at booth No. 20. Among products exhibited will be PRIVINE HCl, an effective, long-acting nasal vasoconstrictor; METANDREN Linguets, the potent androgen, methyltestosterone, for sublingual administration; TRASENTINE, TRASENTINE-PHENOBARBITAL and other products.
Our representatives in attendance will be glad to answer your questions.

Cottrell-Clarke, Inc. **Booth No. 78**
Detroit, Michigan

Davis & Geck, Inc. **Booth No. 61**
Brooklyn, New York

"This One Thing We Do"
Sutures

Davis & Geck, Inc., manufacturer of surgical sutures exclusively, will display a line of sutures and suture-needle combinations applicable to every technique and filling the requirements of every surgical situation. These will consist of D&G Thermo-flex and Claustro-Thermal catgut as well as non-absorbable sutures including D&G Dermalon, Surgilon, Anacap silk, Surgaloy metallic sutures and others. Motion pictures from the Surgical Film Library will be shown in Booth No. 61. Several new subjects will be presented. The company will be represented by Mr. Fred Geck and Mr. Merle Elliott.

Detroit Creamery Company **Booth No. 77**
Detroit, Michigan

NATIONAL DAIRY Sealtest PRODUCTS CORP.

This year's Sealtest exhibit stresses the development of its field force of inspectors.
National Dairy's red Sealtest symbol is found on milk and other milk products. The complex system of inspection, the detail work and research behind it, are all part of a larger program to perfect and improve milk in whatever form it reaches you, wherever you live.

Doho Chemical Corporation **Booth No. 33**
New York, New York

The Makers of "AURALGAN" are introducing at this Meeting their new sulfa drug preparation "OTOSMOSAN", indicated in the treatment and control of chronic suppurative ears. Our Representatives will be happy to explain, in detail, the workings of these medications.
Also to distribute our latest series of three (3) Anatomico-Pathologic Charts of the Ear, in color, suitable for framing.

Duke Laboratories, Inc. **Booth No. 63**
Stamford, Connecticut

At Booth 63, Duke Laboratories, Inc., will have on display Elastoplast and Mediplast, surgical bandages and dressings, also Aquaphor, the better base for ointments, Nivea Creme, Nivea Skin Oil and Basis Soap —Prescribers' Cosmetics.

Ethicon Suture Laboratories **Booth No. 82**
New Brunswick, New Jersey

Tantalum Surgical Materials: Tantalum sutures with Atraloc needles attached, tantalum plates, foil, wire, hemostasis clips and gauze will be featured. Ethicon consultants will also demonstrate the advantages of new 5-0 and 6-0 Tru-Chromicized sutures.

C. B. Fleet Company, Inc. **Booth No. 43**
Lynchburg, Virginia

Phospho-Soda (Fleet) is a highly concentrated and purified, aqueous solution of sodium phosphates. It is non-toxic, rapid but mild in action without irritation of the gastric or intestinal mucosa. It is indicated for hepatic dysfunction, and for its thorough eliminating and cleansing action on the upper and lower gut.

General Electric X-Ray Corporation **Booth No. 54**
Detroit, Michigan

Factual discussions with members of our Michigan sales and service organization during the state meeting will aid you in your future apparatus planning. If you are thinking about new and improved x-ray or electro-medical apparatus, our Layout Engineers can help you with detailed plans and specifications. Possibly an improvement in radiographic end results is indicated. Or you may wish to know how G.E.'s Periodic Inspection and Adjustment Service can help keep your equipment at its maximum operating efficiency. Why not drop in and avail yourself of our wide experience and know-how?

Gerber Products Company **Booth No. 21**
Fremont, Michigan

You are invited to visit Gerber's Baby Foods booth. A qualified infant nutritionist will be in attendance and will be glad to answer questions on Gerber's Baby Cereals, Gerber's Strained Foods and Gerber's Chopped Foods. Samples of Barley Cereal, Cereal Food and Strained Oatmeal will be available.

Hanovia Chemical and Manufacturing Co. **Booth No. 25**
Newark, New Jersey

A complete line of self-lighting ultraviolet quartz lamps will be on display for orificial and general body irradiation. Don't fail to inquire about our germicidal lamps for the destruction of air-borne bacteria. Popular models will be displayed. Courteous and competent representatives will be on hand to greet you.

J. F. Hartz Company **Booth No. 60**
Detroit, Michigan

The J. F. Hartz Company looks forward with great pleasure to the 81st Annual Convention of the MSMS.
It will be our privilege to exhibit there our pharmaceutical products as well as a full line of surgical instruments and equipment.

H. J. Heinz Company **Booth No. 59**
Pittsburgh, Pennsylvania

57

H. J. Heinz Company is displaying and sampling their tin containers of Strained Foods for infants and Junior Foods especially designed for intermediate feeding. Their representatives would appreciate your recommendations regarding these foods.
Register for: *The Nutritive Value of Vegetables,* 12th edition *Nutritional Charts, Nutritional Observatory, Special Dietary Foods Book* and *Your Baby's Diary and Calendar.*

Hoffmann-La Roche, Inc. **Booth No. 17**
Nutley, New Jersey

Pharmaceutical prescription specialties of rare quality produced at Roche Park, where vitamins are made by the ton, will be exhibited. The medical profession's interest in PER-OS-CILLIN, the new stable oral Penicillin; the versatile parasympathetic stimulant Prostigmin; and other scientific accomplishment will be satisfied by Hoffman-La Roche representatives who will be in attendance to discuss clinical problems.

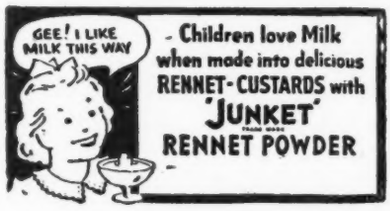
Holland-Rantos Company, Inc. **Booth No. 51**
New York, New York

You are cordially invited to visit the Holland-Rantos booth where on display will be the nationally known and universally used Koromex contraceptive specialties. Besides the new Koromex Set Complete, which is a package combining the necessary items for complete contraceptive technique, will be the new Nylmerate Jelly introduced only a short time ago and received enthusiastically for the treatment of trichomoniasis and vaginal discharge of non-specific origin. Representatives of the company will be on hand to answer all questions. Samples of Nylmerate Jelly and Koromex Jelly will be available, as will copies of the Dickinson-Freret Chart.

G. A. Ingram Company **Booth Nos. 64, 65**
Detroit, Michigan

STILLE INSTRUMENTS will be displayed at the exhibit of the G. A. INGRAM COMPANY, as well as other new and approved items.

"The 'Junket' Folks" **Booth No. 46**
Little Falls, New York



In space No. 46, "The 'Junket' Folks," Chr. Hansen's Laboratory, Inc. Enlarged photos illustrate the action of the rennet enzyme in forming softer finer milk curds. Free literature describes dietary uses of rennet-custards in infant, child, convalescent, or postoperative feeding. Attendants on duty. Complimentary package of "Junket" Rennet Powder and "Junket" Rennet Tablets presented to physicians who register.

Kellogg Company **Booth No. 48**
Battle Creek, Michigan

Kellogg's famous ready-to-eat cereals, important foods in normal and restricted diets, will be displayed. All of these cereals contain valuable whole grain nutrients, either natural or restored. Pep is fortified with extra thiamine (B_1) and with vitamin D. All-Bran is one of the best sources of niacin and iron. A new Diet Manual and Nutritive Value Charts are available at the Kellogg booth. Mrs. Winefred Loggans of the Home Economics Department is in charge of the exhibit.

H. W. Kinney & Sons **Booth No. 30**
Columbus, Indiana

A. Kuhlmann & Company **Booth No. 13**
Detroit, Michigan

Lea & Febiger **Booth No. 29**
Philadelphia, Pennsylvania

Lea and Febiger will exhibit among their new works Soffer's "Diseases of the Adrenals," Quiring's "The Extremities," Olkon's "Essentials of Neuro-Psychiatry," Burch and Winsor's "Primer of Electrocardiography," and Bell on "Renal Diseases." New editions will be shown of Katz's "Electrocardiography," Levinson and MacFate's "Clinical Laboratory Diagnosis," Kovacs' "Electrotherapy and Light Therapy," Kuntz's "Autonomic Nervous System," Kuntz's "Text-book of Neuro-anatomy," Craig and Faust's "Clinical Parasitology," Clement's "Nitrous Oxide-oxygen Anesthesia," Ivy and Curtis on "Fractures of the Jaws," Stone on the "Newborn Infant" and other standard works.

Lederle Laboratories, Inc. **Booth No. 38**
New York, New York

A display of the latest product in the biological and pharmaceutical fields, featuring Folvite, Lederle's brand of Folic Acid."

Libby, McNeill & Libby **Booth No. 74**
Chicago, Illinois

Libby's strained and homogenized baby foods are featured at the Libby booth. Physicians are invited to stop and discuss new findings on the greater availability of iron and ease of digestion of Libby's Council accepted foods for babies.

Eli Lilly and Company **Booth No. 23**
Indianapolis, Indiana

The Lilly exhibit will feature an interesting demonstration in miniature on penicillin culture. Many Lilly products will be on display, and attending Lilly medical service representatives will be present to assist visiting physicians in every possible way.

J. B. Lippincott Company **Booth No. 1**
Philadelphia, Pennsylvania

You are cordially invited to visit the exhibit of LIPPINCOTT SELECTED PROFESSIONAL BOOKS, where many interesting new books and new editions will be available for your inspection. Books of particular interest include: Bancroft-Murray's new two-volume work on SURGICAL TREATMENT OF THE MOTOR SKELETAL SYSTEM; Bancroft-Pilcher's SURGICAL TREATMENT OF THE NERVOUS SYSTEM; Berens and Zuckerman, DIAGNOSTIC EXAMINATION OF THE EYE; Pitkin's CONDUCTION ANESTHESIA; Foot's PATHOLOGY IN SURGERY; Groff and Houtz, DIAGNOSIS AND TREATMENT OF PERIPHERAL NERVES; Stern and Rosenthal, DIABETIC CARE IN PICTURES; and Burket's ORAL MEDICINE.

The Liquid Carbonic Corporation **Booth No. 66**
(Wall Chemicals Division)
Chicago, Illinois

The Medical Gas Division of the Liquid Carbonic Corporation will exhibit their complete line of anesthesia, therapeutic, resuscitating gases, as well as Oxygen Therapy equipment at the 1946 Detroit session of the Michigan State Medical Society.

M & R Dietetic Laboratories, Inc. **Booth No. 44**
Columbus, Ohio

M. & R. Dietetic Laboratories, booth number 44, will display Similac, a food for infants deprived either partially or entirely of breast milk. Messrs. F. H.

Behncke and L. A. MacDonald will appreciate the opportunity to discuss the merit and suggested application for both the normal and special feeding cases.

McKesson Appliance Company **Booth No. 37**
Toledo, Ohio

McNeil Laboratories, Inc. **Booth No. 12**
Philadelphia, Pennsylvania

McNeil Laboratories looks forward with a great deal of pleasure to the resumption of personal contacts with its friends attending the Annual Session of the Michigan State Medical Society. Our representatives will be there not only to welcome you, but to tell you of some of the interesting news about such specialties as Hepatinic—the hemopoietic tonic containing crude (unfractionated) liver concentrate subjected to "enzymatic digestion," Butisol Sodium—the "*Intermediate* Sedative-Hypnotic," Sorparin—the new botanical drug product for hepatobiliary dysfunctions, and other interesting products of research developed during recent years.

Mead Johnson & Company **Booth No. 42**
Evansville, Indiana

Servamus Fidem means We are Keeping the Faith. Almost every physician thinks of Mead Johnson & Company as the maker of Dextri-Maltose, Pablum, Oleum Percomorphum and other infant diet materials —including the new pre-cooked oatmeal cereal, Pabena. But not all physicians are aware of the many helpful services this progressive Company offers physicians. A visit to Booth No. 42 will be time well spent.

Medical Arts Surgical Supply Co. **Booth No. 71**
Grand Rapids, Michigan

You are cordially invited to visit the Medical Arts Surgical Supply Company's display of physicians' equipment, including

Hamilton Furniture
Profex X-ray
Surgical Instruments
Pharmaceuticals

Medical Case History Bureau **Booth No. 52**
New York, New York

Simplifying the Doctor's History Record and Bookkeeping System with the INFO-DEX RECORD CONTROL SYSTEM.
Maintenance of accurate, informative data on both history and financial records is essential in the modern doctor's practice. The INFO-DEX Record Control System helps to keep a constant finger on the physical and financial pulse of the patient. This system correlates information almost automatically for instant reference and research work. Its method of cross-indexing interesting cases according to the disease is unique and exclusive.
THE MEDICAL CASE HISTORY BUREAU Of New York City has specialized for many years in record forms for the doctor's office. Their well-informed representatives will gladly demonstrate the Info-Dex System and discuss your office problems.

Medical Film Guild **Booth Nos. 7, 8**
New York, New York

Medical Film Guild through their "MEDICAL FILMS THAT TEACH" presents a refresher course in fundamental medical problems. These films, representing several years of research, are condensed into half hour productions, each acting as a visual text book. They review such subjects as Parkinson's Disease, the major neuralgias, cervicitis, otolaryngological diseases, contagious diseases, arterial blood pressure, hypothyroidism and industrial medicine. They are available to medical societies, medical schools and hospitals and include projection service at no charge, through grants for postgraduate instruction.

Medical Protective Company **Booth No. 3**
Fort Wayne, Indiana

The Medical Protective Company is represented at booth No. 3 where you are invited to call. Medical Protective Service is an institution of the Medical profession whose legal liability problems we have concentrated upon for forty-seven years. Bring your professional liability questions and problems to booth No. 3.

Merck & Company, Inc. **Booth No. 76**
Rahway, New Jersey

The Merck exhibit is devoted to the important subject of antibiotic agents, with emphasis on Streptomycin. Antibacterial activity, potential clinical applications, and pharmacological data are presented. Literature on Streptomycin and Penicillin is available, as is also literature on other important chemotherapeutic and nutritional agents, including the Vitamins, the Sulfonamides, the anesthetic agent. Vinethene, and Pyridium, for prompt symptomatic relief in genito-urinary infections.
Mr. S. A. Gaffney will be present to greet his old friends and acquaintances.

The Wm. S. Merrell Company **Booth No. 70**
Cincinnati, Ohio

The Merrell exhibit, under the direction of Messrs. Ferd Heckle and Henry Haas, will feature several new therapeutic agents of wide usefulness in clinical practice. Members and guests of the Society are invited to visit the Merrell booth.

Michigan Medical Service **Booth No. 10**
Detroit, Michigan

Largest voluntary prepayment medical-surgical plan in the United States. Charts of progress for past year and past six years of operation: (a) Paid to Doctors for Services Rendered; (b) Number of Services Rendered; (c) Growth in Subscribers and Services Rendered (d) Percentage of Income Paid for Administrative Costs; and (e) Assets and Liabilities.

C. V. Mosby Company **Booth No. 50**
St. Louis, Missouri

A cordial invitation is extended to visit the C. V. Mosby Company, booth, where a representative line of publications of timely interest will be displayed. New books and new editions to be shown will include Clendening-Hashinger "Methods of Diagnosis," Key-Conwell "Fractures, Dislocations and Sprains," Tassman "Eye Manifestations of Internal Diseases," Polyak "The Human Ear in Anatomical Transparencies," Rubin "Uterotubal Insufflation," Banyai "Pneumoperitoneum Treatment," John "Diabetes," Main 'Synopsis of Physiology," and Anderson "Synopsis of Pathology." Mr. Arthur Grabruck will be in attendance and glad to discuss your book requirements with you.

National Live Stock and Meat Board **Booth No. 57**
Chicago, Illinois

You are cordially invited to visit the National Live Stock & Meat Board booth and see the completely revised Food Value Charts in their colorful new dress. The second edition of the Nutrition Yardstick featuring plastic slides and other informative material on nutrition will also be on display.

Wm. R. Niedelson **Booth No. 79**
Detroit, Michigan

The first showing of the newest cardiographic improvement in years, the CARDIOTRON, a direct-writing type, will be made at our exhibit. This instrument will eliminate photographic processess, batteries, and give permanent records.
Also on view will be the latest model Jones "MOTOR-BASAL," the original waterless BMR unit.

Ortho Pharmaceutical Corporation **Booth No. 56**
Linden, New Jersey

Ortho Pharmaceutical Corporation will feature their new Triple Sulfa Vaginal Cream, specifically designed for the treatment of bacterial vaginitis. Literature and samples will be available.
In addition, Ortho's complete line of Genetic Pharmaceuticals will be displayed.

Parke, Davis & Company **Booth No. 16**
Detroit, Michigan

Representatives of PARKE, DAVIS & CO., well informed concerning progress in Pharmaceutical Research, and desirous of presenting new advancements to you, will be in attendance at our Technical Exhibit to discuss the nature and employment of new and present products. Displayed will be such outstanding products as THEELIN, MAPHARSEN, and ADRENALIN PREPARATIONS. The latest type of BIOLOGICALS will be on display. Likewise, PENICILLIN and other therapeutic agents of antibiotic, biological, and chemotherapeutic interest will be shown. We sincerely invite your visit to this Exhibit.

Pet Milk Company **Booth No. 19**
St. Louis, Missouri

A complete display of material illustrating the time-saving Pet Milk services available to physicians. Specially trained representatives will be in attendance to give you information about the production of Pet Milk and its use for infant feeding.Miniature cans will be given to physicians visiting the exhibit.

Philip Morris & Co. Ltd., Inc. **Booth No. 69**
New York, New York

Philip Morris & Company will demonstrate the method by which it was found that Philip Morris Cigarettes, in which diethylene glycol is used as the hygroscopic agent, are less irritating than other cigarettes. Their representative will be happy to discuss researches on this subject, and problems on the physiological effects of smoking.

Picker X-Ray Corporation **Booth Nos. 27, 28**
New York, New York

Picker will exhibit the new Minograph miniature film chest unit which is used for mass survey work; and also for installation in hospitals for screening purposes. A small unit suitable for office practice will also be shown as well as a complete line of radiographic accessories.

Pitman-Moore Company **Booth Nos. 40, 41**
Indianapolis, Indiana

Hospitality will be the watch word at the Pitman-Moore exhibit, booths 40 and 41, with more emphasis on good-fellowship than the products displayed. In attendance to greet their friends in the profession and to discuss recent medical advances will be Messrs. Stuart Ruch, B. J. O'Connell, Jay Ruby and R. G. Mills.

Procter & Gamble Company **Booth No. 36**
Cincinnati, Ohio

Instructions for Bathing of Patient in Bed, the second of Procter & Gamble's time-saving series of handy leaflet pads, is now available. Doctors may also reorder "Instructions for Home Treatment of Acne." Additional leaflets on similar questions of routine home care are being prepared for future distribution.

Professional Management **Booth No. 81**
Battle Creek, Michigan

PROFESSIONAL MANAGEMENT —Records "tailor-made" for the medical profession. If **YOUR** office does not seem to "click," learn how PM helps hundreds to iron out their problems.

Radium Emanation Corporation **Booth No. 18**
New York, New York

In Booth No. 18, THE RADIUM EMANATION CORPORATION will exhibit a wide variety of instruments and applicators used in modern radium therapy, including permanent and removable composite, leakproof Radon Seeds. The advantages of these seeds will be demonstrated by magnified sections showing their construction in detail.

Randolph Surgical Supply Company **Booth No. 72**
Detroit, Michigan

Randolph Surgical Supply Company will display the latest developments of leading Manufacturers. ART RANKIN and CLIFFORD RANDOLPH will be on hand to welcome the Doctors.

W. B. Saunders Company **Booth No. 4**
Philadelphia, Pennsylvania

Mr. Frank Patterson will represent this publishing house and will exhibit its complete line of books, including Bockus' 3-volume work on "Gastro-enterology," new (5th) edition of Beckman's "Treatment," Allen, Barker & Hines' "Peripheral Vascular Diseases," new (2) edition of Mason's "Preoperative and Postoperative Care," new (2nd) edition of Graybiel & White's "Electrocardiography," new (3rd) edition of Andrew's "Diseases of the Skin," Cooke's "Allergy," new (5th) edition of Curtis' "Gynecology," Jackson & Jackson's "Diseases of the Nose, Throat and Ear," new (4th) edition of Mitchell & Nelson's "Pediatrics," and many others.

Schenley Laboratories, Inc. **Booth No. 68**
New York, New York

The Schenley Laboratories' exhibit is devoted entirely to penicillin and penicillin products, and features clinical illustrations of treated patients. The complete apparatus for penicillin aerosol treatment of respiratory infections by inhalation is demonstrated to interested physicians by well-informed attendants at the booth. Descriptive literature concerning this treatment method and various Schenley Laboratories' products is supplied on request.

Schering Corporation **Booth No. 5**
Bloomfield, New Jersey

The Schering exhibit will feature the latest developments in endocrine therapy, radiographic aids and other pharmaceutical advances.
Of particular interest is the presentation of Combisul-TD. Combisul-TD is a sulfonamide combination based upon the now proved therapy which offers the therapeutic benefits of sulfathiazole and sulfadiazine with a material decrease in the danger of renal toxicity and crystalluria.
Schering professional service representatives will be present to answer inquiries and to provide valuable informative literature.

G. D. Searle & Company **Booth No. 11**
Chicago, Illinois

You are cordially invited to visit the Searle Booth where representatives will be happy to answer questions pertaining to Searle Products of Research. Featured will be Searle Aminophyllin, Metamucil, Ketochol, Floraquin, Diodoquin, Pavatrine, Tetrathione, and Gonadophysin.

Sharp & Dohme, Inc. **Booth No. 24**
Philadelphia, Pennsylvania

Sharp & Dohme will have their display at booth No. 24 featuring Tyrothricin Concentrate for Human Use, "Lyovac," Normal Human Plasma, "Sulfathalidine," "Sulfasuxidine," and "Caligesic" Ointment, a greaseless anesthetic and analgesic ointment which possesses definite antipruritic action. A cordial welcome awaits all visitors.

Smith, Kline & French Laboratories **Booth No. 73**
Philadelphia, Pennsylvania

Benzedrine Sulfate Tablets, N.N.R. and Dexedrine Sulfate Tablets are featured at this exhibit.

Since its introduction some ten years ago, Benzedrine Sulfate, N.N.R. (racemic amphetamine sulfate) has grown steadily in clinical usefulness and today occupies a unique place in routine medical practice. For certain selected cases, however, it is often desirable to employ a drug combining an even more preponderant central nervous stimulation with a relatively weaker peripheral effect. A closely related compound—Dexedrine Sulfate (dextro-amphetamine sulfate)—precisely fulfills these requirements.

Our specially trained professional representatives will be glad to answer questions concerning the possible uses of our products in your practice.

Spencer Incorporated **Booth No. 47**
New Haven, Connecticut

You will be interested in Spencer Individually Designed Supports for abdomen, back and breasts. On display are supports for patients who have undergone mastectomy. Also displayed are supports for hernia, visceroptosis, nephroptosis with symptoms, obesity, back conditions and back derangements, antepartum and postpartum wear, and breast conditions.

E. R. Squibb & Sons **Booth No. 58**
New York, New York

An exhibit showing the blood levels produced by penicillin when administered in either Oil and Wax or in aqueous solution. Dosages for a variety of diseases are also shown.

Frederick Stearns & Company **Booth No. 75**
Detroit, Michigan

You are cordially invited to visit the exhibit of Frederick Stearns & Company Division.

Neo-Synephrine Hydrochloride products for intranasal, parenteral and ophthalmic use will be featured.

Appella Apple Powder, remarkably efficient therapy for diarrhea;

Gastric Mucin. "nature's antacid;" and various vitamin products will also be shown.

James Vernor Company **Booth No. 80**
Detroit, Michigan

The James Vernor Company invites everyone attending the Annual Session to visit booth Number 80 and have the Vernor Gnome serve you a free bottle of Vernor's Ginger Ale. Personnel from the James Vernor Company will be on hand to answer any questions regarding Vernor's Ginger Ale, and make arrangements for you to inspect the Vernor plant at 239 Woodward Avenue, Detroit.

Westinghouse Electric Corporation **Booth No. 62**
Pittsburgh, Pennsylvania

Westinghouse Electric will feature the Monoflex, its new deluxe single tube diagnostic x-ray table. See this new unit with:

. . . Motor driven tilting table.
. . . Automatic horizontal leveling stop.
. . . 14″ Tubearm movement—from 30″ to 40″.
. . . Fluoroscopic screen movement 3-3/16″ to 17-3/16″.
. . . New fluoroscopic screen "parking."

White Laboratories, Inc. **Booth No. 49**
Newark, New Jersey

White Laboratories, Inc., at Booth No. 49 present information regarding White's Sulfathiazole Gum—expressly formulated for topical chemotherapy in oropharyngeal infections; White's Otomide—a more effective means of topical chemotherapy in ear infections—and a NEW specialty, White's Mol-Iron Tablets, a new and definite advance in the treatment of iron deficiency anemias.

White's ethically promoted vitamin specialties are also featured. You will find a very cordial welcome by White's Medical Service Representatives in charge of the exhibit.

Winthrop Chemical Company, Inc. **Booth No. 45**
New York, New York

Winthrop Chemical Company, Inc., New York (Booth 45), has available a number of interesting and highly informative booklets. Ask particularly for your copy of Demerol, new analgesic, spasmolytic and sedative, and Creamalin, non-alkaline antacid.

Zimmer Manufacturing Company **Booth No. 2**
Warsaw, Indiana

A full line of Fracture Equipment will be on display. The representative in charge of the booth is well versed in the treatment of fractures, and will gladly demonstrate the use of any items in which the doctors are interested. Among the new items on display, which will interest the surgeons will be the Two Speed Hand Drill, Bone Clamp Set, Electric Cast Cutter, Bush Walking Heel, Webb Bolt Fixation Set, Moore-Blount Blade Plates and Instruments for Hip Surgery, Eggers Bone Plates, McBride Tripod Pin Traction Apparatus, Waugh Clamps, Crego-McCarroll Traction Bow, Blount Knee Retractor, Curry Hip Nail Reamer, Lewin Walking Heel and the Hopkins Hip Nail Extension.

Bond Redemption: "Surveys in the Detroit and Pittsburgh areas show that, during the General Motors and steel strikes, redemption of war and savings bonds did *not* rise above the national average. Recently there has been a definite leveling off of redemption . . . today, some 85,000,000 Americans hold 48.8 billion dollars in bonds designed for individual purchase. All in all, individuals today hold one quarter of the national debt."

* * *

"Michigan Leads With Medical Plan For Vets" and "26 States Copy Michigan's Vet Medical Aid Plan" are typical of the headlines of the many news stories relative to the V. A. program of home-town medical care developed by Michigan doctors of medicine and now being successfully carried on through their co-operation.

The V. A. program, handled through Michigan Medical Service, has been a source of splendid public relations for the medical profession of Michigan.

Michigan State Medical Society
Roster 1946

[An "M" following a name indicates active military service; "E" indicates Emeritus Members; "L" indicates Life Members; "R" indicates Retired Members; all others are Active Members]

Allegan County

Beckett, M. B.....(M) Allegan
Brown, Lewis F.....(M) Otsego
Brunson, Eugene T.....Ganges
Burdick, J. G.....Fennville
Corkill, C. C.....Douglas
Dickinson, C. A.....Wayland
Dolfin, W. E.....(M) Wayland
Flinn, C. C.....Allegan
Hudnutt, Orrin D.....Plainwell
Johnson, E. B.....Allegan
Johnson, H. H.....Martin
Mahan, James E.....Allegan
Medill, W. C.....Plainwell
Ramseyer, Gladwin E.....Plainwell
Stuch, Howard T.....Allegan
Stuck, Olin H.....Otsego
Ten Pas, Henry W.....Hamilton
Van Ness, J. Howard.....Allegan
Vaughan, W. R.....Plainwell
Van Der Kolk, Bert.....Hopkins

Alpena-Alcona-Presque Isle Counties

Bunting, John W.....Alpena
Burkholder, H. J.....Alpena
Carpenter, Clarence A.....Onaway
Constantine, Aeneas.....Harrisville
Hier, Edward A.....Alpena
Kessler, Harold.....(M) Alpena
Lister, George F.....Hillman
Nesbitt, Wm. E.....(M) Alpena
Newton, Wm. B.....Alpena
Ramsey, J. A.....(M) Alpena
O'Donnell, F. J.....Alpena
Parmenter, E. S.....Alpena
Purdy, John W.....Alpena
Rutledge, S. H.....(M) Rogers City
Slade, H. G.....Ionia
Trudeau, J. M.....(M) Cheboygan
Wienczewski, Theophile.....(M) Alpena

Barry County

Altland, J. K.....Hastings
Bernard, Prosper G.....(M) Delton
Clarke, Daniel M.....Hastings
Finnie, R. G.....(M) Hastings
Fisher, Gordon F.....(M) Corpus Christi, Texas
Gwinn, A. B.....Hastings
Harkness, Robert B.....Hastings
Keller, Guy C.....Hastings
Lathrop, Clarence P.....(E) Hastings
Lofdahl, Stewart.....Nashville
Lund, Chester A. E.....Middleville
McIntyre, K. S.....(M) Hastings
Morris, Edgar T.....(L) Nashville
Wedel, Herbert S.....Hastings

Bay-Arenac-Iosco Counties

Alcorn, Kent.....Bay City
Allen, A. D.....Bay City
Andrews, F. T.....Bay City
Asline, J. N.....(M) Essexville
Austin, Justis.....Tawas City
Ballard, W. R.....(E) Bay City
Boulton, A. O.....(E) Gladwin
Brown, G. M.....Bay City
Chapin, Frederick J.....Bay City
Connelly, C. J.....(M) Bay City
Cooper, Harry R.....Oscoda
Criswell, R. H.....Bay City
Dardas, M. J.....(M) Bay City
DeWaele, Paul L.....(M) Bay City
Drummond, Fred.....Kawkawlin
Dumond, V. H.....Bay City
Fisher, Robert E.....(M) Bay City
Foster, L. Fernald.....Bay City
Freel, John A.....Bay City
Gamble, W. G., Jr.....Bay City
Groomes, Charles.....Bay City
Grosjean, J. C.....Bay City
Gunn, Robert.....Bay City
Hagelshaw, G. L.....(M) Bay City
Hasty, Earl.....Whittemore
Hess, C. L.....Bay City
Heuser, Harold H.....Bay City
Horowitz, S. Franklin.....(M) Bay City
Huckins, E. S.....Bay City
Hughes, E. C.....Bay City
Husted, F. Pitkin.....(M) Bay City
Jacoby, A. H.....(M) Bay City
Jens, Otto.....Essexville
Johnson, Orlen J.....Bay City
Jones, Clement R.....Bay City
Jones, Jerry M.....Bay City
Keho, John.....Bay City
Kerr, William.....(E) Bay City
Kessler, Mana.....Bay City
Kessler, S.....Bay City
Knobloch, Howard.....(M) Bay City
Lane, Milton.....Los Angeles, California
Lerner, David.....(M) Au Gres
Loftin, Robert.....Bay City
MacRae, L. D.....Bay City
McDonnell, Walter R.....(M) Pinconning
McEwan, J. H.....Bay City
MacPhail, Joseph.....(M) Bay City
Medvesky, M. J.....(M) Bay City
Miller, Edwin C.....(M) Bay City
Miller, Maurice C.....(M) Sanford
Mitton, Orland W.....East Tawas
Moore, George W.....Bay City
Moore, Neal R.....(M) Bay City
Mosier, D. J.....(M) Bay City
Pearson, Stanley M.....(M) Bay City
Perkins, Roy C.....Bay City
Reutter, C. W.....(M) Bay City
Scrafford, Royston E.....Bay City
Shafer, Harold C.....(M) Bay City
Sherman, R. N.....Bay City
Siler, Delbert E.....Augusta, Ga.
Staley, Hugh.....Omer
Stewart, G. C.....Bay City
Stinson, W. S.....Bay City
Stuart, Alexander A.....Bay City
Stuart Kenneth.....(Associate) Bay City
Tarter, Clyde S.....(M) Bay City
Timreck, Harold A.....(M) Beaverton
Tupper, Virgil.....(R) Bay City
Urmston, Paul R.....Bay City
Vail, Harry F.....(M) Bay City
Warren, E. C.....(E) Bay City
Wilcox, J. W.....Bay City
Wilson, Thomas G.....Bay City
Wittwer, E. A.....Bay City
Zaremba, Aloysius J.....Bay City
Ziliak, A. L.....Bay City

Berrien County

Anderson, H. B.....Watervliet
Allen, Robert C.....St. Joseph
Anderson, Bertha.....St. Joseph
Bartlett, W. M.....(M) Benton Harbor
Belsley, Frank K.....Benton Harbor
Bliesmer, A. F.....St. Joseph
Brown, F. W.....Watervliet
Brown, Rolland J.....(M) Benton Harbor
Burrell, H. J.....Benton Harbor
Cawthorne, H. J.....Benton Harbor
Conybeare, R. C.....Benton Harbor
Crowell, Richard.....(M) St. Joseph
Dunnington, R. N.....Benton Harbor
Eidson, Hazel.....Berrien Springs
Ellet, W. C.....(M) Benton Harbor
Emery Clayton.....St. Joseph
Faber, Michael.....Benton Harbor
Friedman, Morris.....New Buffalo
Garrett, Evan L.....(M) Niles
Gillette, Clarence H.....Niles
Green, Robert.....Eau Claire
Gregory, James.....Berrien Center
Hanna, P. G.....St. Joseph
Harper, Ina.....Benton Harbor
Harrison, L. L.....Niles
Hart, Russell T.....(M) Niles
Helkie, Wm. L.....Three Oaks
Henderson, Fred.....Niles
Henderson, Robert.....Niles
Herring, Nathaniel A.....Niles
Hershey, Noel J.....(M) Niles
Howard, R. B.....Benton Harbor
Huff, H. D.....Niles
King, Frank Jr.....(M) Benton Harbor
Kling, H. C.....Niles
Kok, Harry.....Benton Harbor
Leva, John B.....(M) Benton Harbor
McDermott, J. J.....St. Joseph
Miller, E. A.....Berrien Springs
Mitchell, Carl A.....Benton Harbor
Moore, T. Scott.....Niles
Neville, J. Wm.....Benton Harbor
Ozeran, Chas J.....Benton Harbor
Pritchard, H. M.....Niles
Reagan, Robert E.....(M) Benton Harbor
Rein, Gerald.....Benton Harbor
Richmond, D. M.....St. Joseph
Rosenberry, A. A.....Benton Harbor
Ruth, J. Griswold.....(M) Benton Harbor
Schairer, Wm. W.....Coloma
Smith, W. A.....Berrien Springs
Sowers, Bouton.....(M) Benton Harbor
Strayer, J. C.....Buchanan
Thorup, Don W.....Benton Harbor
Tompkins, C. E.....Benton Harbor
Waterson, Roy S.....Niles
Westervelt, H. O.....Benton Harbor
Winter, Joseph A.....St. Joseph
Woodford, H. E.....Benton Harbor
Yeomans, T. G.....St. Joseph

Branch County

Andrews, Frank A.....Coldwater
Bailey, J. E.....Coldwater
Beck, Perry C.....Bronson
Bien, W. J.....Coldwater
Culver, Bert W.....Coldwater
Culver, Dean.....(M) Bronson
Eberhart, L. L.....Angola, Ind.
Far, S. E.....Quincy
Fraser, R. J.....(M) Coldwater
Heustis, Albert E.....Coldwater
Joerin, William.....(M) Coldwater
McLain, R. W.....Jackson
Meier, H. J.....(M) Coldwater
Mooi, H. R.....Coldwater
Olmstead, Kenneth L.....(M) Coldwater
Phillips, F. L.....Bronson
Rees, Kendall B.....Coldwater
Rennell, E. J.....Coldwater
Schultz, Samuel.....Coldwater
Scovill, H. A.....(M) Ypsilanti
Smith, L. Lloyd....(M) Oregon City, Ore.
Thomas, J. A.....Coldwater
Wade, R. L.....Coldwater
Walton, N. J.....Quincy
Weidner, H. R.....(M) Coldwater
Woods, R. H.....La Salle, Ill.

Calhoun County

Amos, Norman H.....(M) Battle Creek
Baribeau, R. H.....Battle Creek
Becker, H. F.....(M) Battle Creek
Beuker, Herman.....Marshall
Bodine, Harold.....(M) Battle Creek
Bonifer, Philip P.....(M) Battle Creek
Brainard, C. W.....(M) Battle Creek
Campbell, Alice.....Albion
Campbell, R. J.....(M) Battle Creek
Capron, Manley J.....(M) Battle Creek
Church, Starr K.....(E) Marshall
Chynoweth, W. R.....(M) Battle Creek
Cooper, J. E.....Battle Creek
Curless, Grant R.....(M) Unknown
Curry, Robert K.....(M) Homer
Dickson, A. R.....Battle Creek
Dodge, Warren M. Jr.....Battle Creek
Fairbanks, Stephen.....Albion
Finch, D. L.....Battle Creek
Forsyth, J. F.....(M) Albion
Frank, David L.....(M) Unknown
Fraser, R. H.....Battle Creek
Funk, L. D.....Athens
Gething, Joseph W.....Battle Creek
Giddings, A. M.....Battle Creek
Gilfillan, Margery J.....Battle Creek
Gorsline, Clarence S.....Battle Creek
Graubner, F. L.....(M) Marshall
Hafford, A. T.....Albion
Hansen, E. L.....Battle Creek
Hansen, Harvey C.....M) Battle Creek
Harris, Rowland H.....Battle Creek
Haughey, Wilfrid .....Battle Creek
Heald, C. W.....Battle Creek
Henderson, Louis M.....Albion
Henderson, Philip .....Albion
Herzer, Henry A.....Albion
Hibbs, Donald K.....(M) Battle Creek
Hills, C. R.....Battle Creek
Holtom, B. G.....Battle Creek
Howard, W. L.....Battle Creek
Hoyt, Aura A.....Battle Creek
Hubly, James W.....(M) Battle Creek
Humphrey, Archie E.....Marshall
Humphrey, Arthur A.....(M) Battle Creek
Jeffrey, J. R.....Battle Creek
Jesperson, Lydia.....Battle Creek
Jones, T. K.....(M) Marshall
Keagle, Leland R.....(M) Battle Creek
Keeler, K. B.....Albion
Kingsley, Paul C.....(M) Battle Creek
Kinde, M. R.....(M) Battle Creek
Knapp, Nettie E.....Battle Creek
Kolvoord, Theodore.....Battle Creek
Lam, Francis.....(M) Battle Creek
Leitch, Robert.....(M) Union City
Levy, Joseph.....(M) Battle Creek
Lewis, W. B.....Battle Creek
Lowe, H. M.....(M) Battle Creek
Lowe, Kenneth M.....Battle Creek
Lowe, Stanley T.....(M) Battle Creek
MacGregor, Archibald E.....Battle Creek
Manni, Lawrence C.....Battle Creek
Meister, F. O.....(M) Battle Creek
Melges, F. J.....Battle Creek
Mercer, C. M.....Battle Creek
Morrison, Donald B.....(M) Battle Creek
Moshier, Bertha .....(R) Battle Creek
Mullenmeister, H. F.....(M) Battle Creek
Mustard, Russell.....Battle Creek
Norman, Estelle G.....Battle Creek
Norton, Richard C.....(M) Battle Creek
Patrick, Gilbert.....Battle Creek
Patterson, Adonis.....(M) Battle Creek
Putman, W. N.....Battle Creek
Robbert, John.....Battle Creek
Robins, Hugh.....Battle Creek
Rorick, Wilma Weeks.....Battle Creek
Rosenfeld, Joseph E.....Battle Creek
Roth, Paul.....(R) Battle Creek
Royer, C. W.....(M) Battle Creek
Schelm, George W.....Battle Creek
Selmon, Bertha L.....Battle Creek
Sharp, A. D.....Albion
Shipp, Leland P.....Battle Creek
Sibilsky, A. Clark.....Battle Creek
Simpson, Robert S.....(M) Battle Creek
Slagle, George W.....(M) Battle Creek
Sleight, James D.....(M) Battle Creek
Smith, T. C.....(M) Toronto, Ont.
Stadle, Wendell H.....(M) Battle Creek
Stiefel, Richard.....Battle Creek
Tannenholz, Harold S.....Battle Creek
Taylor, Clifford B.....(M) Albion
Toms, Roland E.....(M) Lockport, L. I.
Upson, W. O.....Battle Creek
Van Camp, Elijah.....Battle Creek
Verity, Lloyd E.....Battle Creek
Walters, F. R.....Battle Creek
Watson, Bernard A.....
(M) Clifton Springs, N. Y.
Wencke, Carl G.....Battle Creek
Winslow, Rollin C.....Battle Creek
Winslow, Sherwood B.....Battle Creek
Zindler, George A.....Battle Creek
Zinn, Karl.....(M) Battle Creek

Cass County

Adams, U. M.....Marcellus
Clary, R. I.....(M) Dowagiac
Hickman, John .....Dowagiac
Kelsey, James H.....Cassopolis
Loupee, George.....Dowagiac
Loupee, Sherman L.....Dowagiac
Lyman, W. R.....Dowagiac
Newsome, Otis.....Cassopolis
Pierce, Kenneth C.....Dowagiac
Rice, Franklin.....(M) Niles
Zwergel, E. H.....Cassopolis

Chippewa-Mackinac Counties

Bandy, Festus C.....Sault Ste. Marie
Blair, H. M.....(M) Sault Ste. Marie
Carr, E. S.....Pickford
Conrad, George A.....Sault Ste. Marie
Gilfillan, E. O.....(M) Sault Ste. Marie
Hagele, Marie A.....Sault Ste. Marie
Harrington, H. M.....Sault Ste. Marie
Howe, D. C.....Sault Ste. Marie
McBryde, Lyman M.....Sault Ste. Marie
McDonald, Allan W.....Mackinac Island
Mertaugh, W. F.....(M) Sault Ste. Marie
Montgomery, B. T.....Sault Ste. Marie
Rhind, E. S.....Sault Ste. Marie
Vegors, Stanley H.....Sault Ste. Marie
Wallen, Le Roy J.....(M) Sault Ste. Marie
Willison, C.....Sault Ste. Marie
Yale, I. V.....Sault Ste. Marie

Clinton County

Cook, Bruno.....Westphalia
Elliott, Bruce R.....Ovid
Foo, Charles T.....St. Johns
Frace, Guy H.....St. Johns
Henthorn, A. C.....St. Johns
Ho, Thomas Y.....St. Johns
Luton, F. E.....St. Johns
McWilliams, W. B.....Maple Rapids
Russell, Sherwood R.....(M) St. Johns
Stoller, Paul R.....Fowler
Wahl, George E.....(M) St. Johns

Delta-Schoolcraft Counties

Bernier, A. Barrso.....Nahma
Benson, G. W.....Escanaba
Boyce, D. H.....Escanaba
Brenner, Ervin J.....(M) Manistique
Carlton, A. J.....Escanaba
Chenoweth, Nancy R.....(E) Escanaba
Clausen, Claire H.....(M) Dearborn
Defnet, Harry J.....Escanaba
Diamond, J. A.....Gladstone
Frenn, N. J.....Bark River
Fyvie, James.....(M) Manistique
Groos, Harold Q.....Escanaba
Groos, Louis P.....Escanaba
Hult, Otto S.....Gladstone
Kitchen, A. S.....Escanaba
Lemire, Wm. A.....(M) Escanaba
Lindquist, N. L.....Manistique
McInerney, Edna C.....Escanaba
McInerney, Thomas A.....(M) Escanaba
Miller, A. H.....Gladstone
Moll, G. W.....Escanaba
Pleune, R. E.....(M) Escanaba
Shaw, George A.....Manistique
Walch, J. J.....Escanaba

Dickinson-Iron Counties

Alexander, W. H.....Iron Mountain
Boyce, George H.....Iron Mountain
Browning, James L.....Iron Mountain
Cooper, C. A.....Stambaugh
De Salvo, F.....Niagara, Wis.
Fiedling, Wm.....Norway
Frederickson, Geron.....Iron Mountain
Gloss, Kenneth E.....(M) Colorado
Haight, Harry H.....(M) Crystal Falls
Hayes, R. E.....Sagola
Huron, W. H.....Iron Mountain
Irvine, L. E.....Iron River
Kofmehl, Wm. J.....Stambaugh
McEachran, Hugh D.(M) Iron Mountain
Menzies, Clifford.....Iron Mountain
Retallack, R. C.....(M) Iron River
Smith, Donald R.....Iron Mountain

Eaton County

Arner, Fred L. ..... Bellevue
Brown, B. Philip ..... (M) Charlotte
Burdick, Austin F. ..... Grand Ledge
Carothers, Daniel J. ..... (M) Charlotte
Engle, Paul ..... Olivet
Goff, S. B. ..... (M) Eaton Rapids
Hannah, H. W. ..... Charlotte
Huber, Chas. D. ..... Charlotte
Huyck, Stanhope P. ..... (M) Sunfield
Imthun, Edgar F. ..... (M) Grand Ledge
McLaughlin, C. L. D. ..... Vermontville
Myers, Albert W. ..... Potterville
Paine, E. Madison, Jr. ..... (M) Traverse City
Rummell, Robert J. ..... Grand Ledge
Sassaman, F. W. ..... Charlotte
Sevener, Lester G. ..... Charlotte
Stucky, George ..... Charlotte
Van Ark, Bert ..... (M) Eaton Rapids
Van Kolken, P. J ..... Eaton Rapids
Willits, C. O. ..... Charlotte

Genessee County

Adams, Chester ..... (M) Grand Blanc
Anderson, Harley H. ..... (M) Mt. Morris
Andrews, N. A. C. ..... (M) Flushing
Anthony, Geo. E. ..... (M) Flint
Backus, Glenn R. ..... (M) Flint
Baird, James ..... Flint
Baird, William C. ..... (M) Flint
Bald, Frederick W. ..... (M) Flint
Barbour, Fleming A. ..... (M) Flint
Baske, Franklin W. ..... Flint
Bateman, L. G. ..... (M) Flint
Benson, J. C. ..... Flint
Bernstein, Eli N. ..... (M) Flint
Biggar, H. R. ..... Flint
Bishop, D. L. ..... Flint
Blakeley, A. C. ..... Flint
Bogart, Leon M. ..... Flint
Boles, William P. ..... Flint
Bonathan, Alvin T. ..... Flint
Bradley, Robert ..... (M) Flint
Brain, R. Gordon ..... Flint
Branch, Hira E. ..... (M) Flint
Brasie, Donald R. ..... Flint
Briggs, Guy D. ..... Flint
Bruce, Wm. W. ..... (M) Swartz Creek
Buchanan, W. Fremont ..... (M) Fenton
Burkett, L. V. ..... Flint
Burnell, Max ..... Flint
Burnside, Howard B. ..... (M) Flint
Caster, E. Wilbur ..... Huntington Woods
Chambers, Myrton S. ..... Flint
Chandler, M. E. ..... Flint
Charters, John H. ..... Flint
Clark, Clifford P. ..... Flint
Colwell, C. W. ..... (M) Flint
Connell, J. T. ..... Flint
Conover, G. V. ..... (M) Flint
Conover, T. S. ..... Flint
Cook, Henry ..... Flint
Covert, F. L. ..... Gaines
Cox, T. J. ..... (M) Flint
Credille, B. A. ..... Flint
Curry, George ..... Flint
Curtin, J. H. ..... Flint
David, T. George ..... Flint
Del Zingro, N. ..... Davison
Denholm, Nan H. ..... Flint
Dickstein, Bernard ..... (M) Flint
Dimond, E. G. ..... Flint
Dodds, F. E. ..... Flint
Drewyer, Glen ..... (M) Flint
Edgerton, A. C. ..... Clio
Eichhorn, Ernest ..... Flint
Eickhorst, Thomas N. ..... (M) Flint
Elliott, H. B. ..... Flint
Ettinger, Ralph D. ..... Fenton
Evers, J. W. ..... Flint
Farhat, M. M. ..... (M) Flint
Fee, Manson G. ..... (M) Flint
Finkelstein, T. ..... (M) Flint
Flynn, S. T. ..... (M) Flint
Foley, S. I. ..... Flint
Fuller, H. T. ..... (M) Mt. Morris
Gelenger, Stephen M. ..... (M) Flint
Gleason, N. Arthur ..... Flint
Goering, George R. ..... Flint
Golden, H. Maxwell ..... Flint
Goodfellow, B. T. ..... Flint
Gorne, S. S. ..... (M) Flint
Grover, H. F. ..... Flint
Griffin, Ernest P. ..... (M) Flint
Guile, Earl ..... Flint
Guile, G. S. ..... Flint
Gundry, G. L. ..... Grand Blanc
Gutow, Isadore ..... Flint
Gutow, J. J. ..... (M) Flint
Hague, R. F. ..... (M) Flint
Hall, R. F. ..... (M) Flint
Halligan, Raymond S. ..... Flint
Hamady, Ruth ..... Flint
Hamilton, A. J. ..... Flint
Harper, A. W. ..... Flint
Harper, Homer ..... Flint
Harrison, Leo D. ..... Flint
Hawkins, James E. ..... Flint
Hays, George A. ..... (M) Flint
Hilt, Lawrence M. ..... (M) Flint
Hiscock, H. H. ..... (M) Flint
Houston, James ..... Swartz Creek
Hubbard, Wm. B. ..... Flint
Hufton, Wilfred L. ..... Flint
Jefferson, Harry ..... Flint
Jermstad, Robert J. ..... Flint
Johnson, Arthur H. ..... Flint
Johnson, Frank D. ..... (M) Flint
Jones, Lafon ..... Flint
Kaleta, Edward ..... (M) Flint
Kaufman, Lewis D. ..... (M) Flint
Kirk, A. Dale ..... Flint
Knapp, M. S. ..... (R) Fenton
Kretchmar, A. H. ..... Flint
Kurtz, J. J. ..... Flint
Lambert, L. A. ..... (M) Goodrich
Leach, J. L. ..... Flint
Livesay, Jacskon E. ..... Flint
Logan, G. W. ..... Flushing
Macduff, R. B. ..... Flint
MacGregor, D. M. ..... Flint
Macksood, Joseph ..... Flint
Marsh, H. L. ..... Flint
Marshall, William H. ..... Flint
McArthur, A. ..... Flint
McGarry, R. A. ..... Flint
McLeod, K. W. A. ..... Flint
Miller, Bryce ..... Flushing
Miller, Edwin E. ..... Flint
Miller, Loren Eugene ..... Flint
Miltich, Anthony J. ..... Flint
Moore, John W. ..... Flint
Moore, Kenneth B. ..... Flint
Morrish, Ray S. ..... Flint
Morrissey, V. H. ..... Flint
Mosier, Edward C. ..... Otisville
Odle, Ira ..... Flint
Olson, James A. ..... Detroit
O'Neil, C. H. ..... (Retired) Deckerville
Orr, J. Walter ..... Flint
Phillips, R. L. ..... Flint
Pfeifer, A. C. ..... Mt. Morris
Pratz, O. C. ..... Flint
Preston, Otto ..... Flint
Probert, C. C. ..... Flint
Randall, H. E. ..... Flint
Reeder, Frank E. ..... Flint
Reichard, Orill ..... Flint
Reid, Wells C. ..... Goodrich
Richeson, V. ..... Flint
Rieth, George F. ..... (M) Flint
Reynolds, A. J. ..... Flint
Roberts, Floyd A. ..... Flint
Rowell, Wilfred J. ..... (M) Flint
Rowley, James A. ..... Flint
Rulney, Max ..... (M) Flint
Rundles, Walter Z. ..... (M) Flint
Rynearson, W. J. ..... Fenton
Sandy, K. R. ..... (M) Flint
Sauber, Bertrum ..... Flint
Scavarda, Charles J. ..... (M) Flint
Schiff, B. A. ..... (M) Flint
Scott, R. D. ..... Flint
Searles, Karl F. ..... Flint
Shantz, L. O. ..... Flint
Sleeman, Blythe R. ..... Linden
Sheeran, Daniel H. ..... Flint
Shipman, Charles W. ..... Flint
Sirna, Anthony R. ..... (M) Flint
Smith, D. C. ..... Flint
Smith, E. C. ..... Flint
Smith, Maurice J. ..... (M) Flint
Sniderman, Benjamin ..... Flint
Snyder, Charles E. ..... (M) Swartz Creek
Sorkin, Morris L. ..... (M) Flint
Sorkin, S. S. ..... (M) Flint
Stephenson, Robert A. ..... Flint
Steinman, F. H. ..... (M) Flint
Stevenson, W. W. ..... Flint
Streat, R. W. ..... Flint
Stroup, C. K. ..... Flint
Sutherland, James K. ..... Flint
Sutton, George ..... Flint
Sutton, M. R. ..... Flint
Thompson, Alvin ..... Flint
Tofteland, Elmer H. ..... (M) Flint
Treat, D. L. ..... Flint
Vander Slice, David ..... Flint
Van Gorder, George ..... (M) Davison
Vary, Edwin P. ..... (M) Flint
Walcott, C. G. ..... (M) Fenton
Ward, Nell ..... Flint
Ware, Frank A. ..... Flint
Wark, D. R. ..... Flint
Wentworth, John E. ..... Flint
Werness, Inga W. ..... Flint
White, Carl H. ..... (M) Fenton
White, Herbert ..... Flint
Williams, W. S. ..... Flint
Willoughby, G. L. ..... (M) Flint
Willoughby, L. L. ..... Flint
Wills, T. N. ..... Flint
Wilson, W. K. ..... (M) Flint
Woughter, Harold W. ..... (M) Flint
Wright, D. R. ..... Flint
Wyman, J. S. ..... Flint

Gogebic County

Albert, S. G. ..... Ironwood
Anderson, Charles E. ..... Bessemer
Eisele, D. C. ..... Ironwood
Gertz, M. A. ..... Ironwood
Gorrilla, A. C. ..... Ironwood
Gullickson, Miles ..... (M) Ironwood
Hendrickson, A. O. ..... Ironwood
Lieberthal, M. J. ..... Ironwood
Lieberthal, Paul ..... Ironwood
Lojacono, Salvatore ..... Ironwood
Maccani, Wm. L. ..... Ironwood
Nezworski, H. T. ..... Ironwood
O'Brien, A. J. ..... Ironwood
Pierpont, D. C. ..... Ironwood
Pinkerton, H. A. ..... (M) Ironwood
Stevens, Charles E. ..... Ironwood
Tressel, H. A. ..... Wakefield
Urquhart, C. C. ..... Ironwood
Wacek, W. H. ..... Ironwood

Grand-Traverse-Leelanau-Benzie Counties

Atkinson, C. F. ..... Traverse City
Baker, Dorothy ..... Traverse City
Baumann, Milton C. ..... (M) Traverse City
Beall, John G. ..... Traverse City
Berghorst, John ..... Traverse City
Bolan, Ellis J. ..... Suttons Bay
Brownson, Jay J. ..... Kingsley
Brownson, Kneale M. ..... (M) Traverse City
Bushong, B. B. ..... Traverse City
Ellis, Claude I. ..... Suttons Bay
Gallagher, W. H. ..... Traverse City
Gauntlett, J. W. ..... Traverse City
Goodrich, Dwight ..... Traverse City
Grawn, F. A. ..... Traverse City
Hall, James W. ..... (M) Traverse City
Hamilton, Earl E. ..... (M) Traverse City
Haynes, H. B. ..... Traverse City
Huene, Nevin ..... (M) Traverse City
Huston, Russell R. ..... Elk Rapids
Hyslop, Wm. T. ..... Traverse City
Jerome, Jerome T. ..... Traverse City

Kitson, V. H. ... Elk Rapids
Knapp, Joseph L. ... (M) Traverse City
Kyselka, H. B. ... Traverse City
Lemen, Charles E. ... (M) Traverse City
Lentz, R. J. ... (M) Traverse City
Lossman, R. T. ... Traverse City
Mumby, Clinton J. ... (M) Traverse City
Murphy, Fred E. ... Traverse City
Nickels, M. M. ... (M) Traverse City
Osterlin, Mark ... Traverse City
Power, Frank H. ... (M) Traverse City
Sheets, R. Philip ... Traverse City
Sladek, E. F. ... Traverse City
Stone, Fordyce H. ... Beulah
Swanton, L. ... Traverse City
Swartz, F. G. ... Traverse City
Thacker, Fred R. ... Frankfort
Thirlby, E. L. ... Traverse City
Thompson, T. W. ... Traverse City
Trautman, Frederick B. ... (M) Frankfort
Way, Lewis R. ... (M) Traverse City
Weitz, Harry ... Traverse City
Wilcox, Paul H. ... Traverse City
Willard, Wm. G. ... Benzonia
Willoughby, Frances L. (M) Traverse City
Zielke, I. H. ... (M) Traverse City
Zimmerman, J. G. ... Traverse City

Gratiot-Isabella-Clare Counties

Aldrich, Alfred L. ... Ithaca
Barstow, D. K. ... (M) St. Louis
Barstow, Wm. E. ... St. Louis
Becker, Myron G. ... Edmore
Budge, M. J. ... Ithaca
Burch, L. J. ... Mt. Pleasant
Burt, C. E. ... Ithaca
Carney, T. J. ... Alma
Dale, Edward C. ... (M) Shepherd
Davis, L. L. ... (M) Mt. Pleasant
Drake, Wilkie M. ... Breckenridge
Du Bois, C. F. ... Alma
Elliott, L. E. ... Edmore
Graham, B. J. ... (M) Alma
Hall, B. C. ... Pompeii
Hammerberg, Kuno ... (M) Clare
Harrigan, Wm. L. ... Mt. Pleasant
Hersee, Wm. E. ... (M) Mt. Pleasant
Hyslop, Leland F. ... Mt. Pleasant
Johnson, P. R. ... Mt. Pleasant
McArthur, Stewart C. ... Clare
Miller, S. W. ... (M) Alma
Oldham, E. S. ... (M) Breckenridge
Putzig, Louis M. ... Blanchard
Rondot, E. F. ... Lake
Rottschafer, J. L. ... (M) Alma
Silvert, P. P. ... Vestaburg
Slattery, F. G. ... (M) Clare
Strange, Russell H. ... Mt. Pleasant
Waggoner, R. L. ... St. Louis
Wilcox, R. A. ... Alma
Wilson, Earl C. ... Harrison
Wolfe, Kenneth P. ... (M) Alma
Wood, Cornelius B. ... (M) Clare

Hillsdale County

Bates, Morton P. ... Hillsdale
Davis, L. A. ... Montgomery
Day, Luther W. ... Jonesville
Douglas, E. W. ... Hillsdale
Green, B. F. ... Hillsdale
Hanke, George R. ... Ransom
Hodge, C. L. ... Reading
Johnson, C. E. ... (M) Hillsdale
Kinzel, R. W. ... (M) Litchfield
MacNeal, John A. ... Hillsdale
Mattson, H. F. ... (M) Hillsdale
Miller, Harry C. ... Hillsdale
Moench, George F. ... Hillsdale
Sawyer, Walter W. ... (M) Hillsdale
Sterling, John S. ... Jerome
Strom, A. W. ... (M) Hillsdale

Houghton-Baraga-Keweenaw Counties

Abrams, James C. ... Calumet
Acocks, J. R. ... (M) Houghton
Aldrich, A. B. ... Houghton
Aldrich, Addison D. ... Houghton
Aldrich, Leonard ... (M) Hancock
Bourland, Phillip D. ... Calumet
Brewington, George F. ... (E) Mohawk
Burke, John ... Hubbell
Gregg, W. T. S. ... (E) Calumet
Hilmer, R. E. ... Beacon Hill
Hosking, Frederick S. ... (M) Calumet
Janis, A. J. ... Hancock
Kadin, Maurice ... (M) Chicago
King, Wm. T. ... Ahmeek
Kirton, Joseph R. W. ... Calumet
Kolb, F. E. ... (M) Calumet
La Bine, Alfred ... Houghton
Levin, Simon ... Houghton
Mac Queen, Donald K. ... (E) Laurium
Manthei, W. A. ... Lake Linden
Marshall, Frank F. ... L'Anse
McClure, Robert James ... Calumet
Murphy, Percy C. ... Ahmeek
Roberts, Melvin D. ... (M) Hancock
Roche, A. C. ... Calumet
Roche, Andrew M. ... (M) Calumet
Sarvela, H. L. ... Hancock
Scott, Benton V. D. ... (M) Hancock
Sloan, P. S. ... Houghton
Smith, Charles R. ... Houghton
Stahr, H. S. ... Los Angeles, Calif.
Stern, Isadore D. ... Houghton
Stewart, Marshall ... (M) Unknown
Tinetti, Ernest F. ... (M) Laurium
Whitmore, R. C. ... Hancock
Wickliffe, T. P. ... Calumet
Willson, P. H. ... Chassell
Winkler, Henry J. ... L'Anse
Wood, Neal N. ... Calumet

Huron County

Gettle, Roy R. ... Kinde
Henderson, J. Bates ... Sebewaing
Herrington, Charles I. ... Bad Axe
Herrington, Willet J. ... Bad Axe
Holdship, Wm. B. ... Ubly
Monroe, Duncan J. ... Elkton
Morden, Charles B. ... Bad Axe
Oakes, C. W. ... Harbor Beach
Ritsema, John ... Sebewaing
Scheurer, C. ... Pigeon
Thumme, Harrison F. ... Sebewaing

Ingham County

Atkinson, Everett H. ... East Lansing
Badgley, W. O. ... Lansing
Barrett, C. D. ... Mason
Bartholomew, Henry ... (R) Lansing
Bauer, Theodore I. ... Lansing
Behen, Wm. C. ... Lansing
Bellinger, E. C. ... Lansing
Black, Charles E. ... Williamston
Black, Gertrude ... Williamston
Bobczynski, Wilhelmina ... Lansing
Bradford, C. W. ... Lansing
Breakey, Robert S. ... Lansing
Briede, Paul C. ... Lansing
Brown, F. W. Jr. ... (M) Lansing
Brubaker, Earl ... Lansing
Brucker, Karl B. ... Lansing
Bruegel, Oscar H. ... East Lansing
Burhans, Robert ... (M) Lansing
Calomeni, Anthony D. ... Lansing
Cameron, W. J. ... Lansing
Carr, E. I. ... Lansing
Christian, L. G. ... Lansing
Clark, William E. ... (M) Mason
Clarke, Emile A. ... Lansing
Clinton, George R. ... (M) Mason
Cook, Martin J. ... (M) Lansing
Cook, R. J. ... Lansing
Cope, H. E. ... Lansing
Corneliuson, G. B. ... Lansing
Corsaut, J. C. ... Mason
Cross, Frank S. ... Lansing
Cummings, G. D. ... Lansing
Darling, L. H. ... Lansing
Dart, Dorothy ... Lansing
Dean, Carleton ... Lansing
De Kleine, Wm. ... Lansing
De Vries, C. F. ... Lansing
Dolbee, Malcolm ... (M) East Lansing
Doyle, Charles R. ... (M) Lansing
Doyle, C. P. ... Lansing
Drolett, Donald J. ... (M) Ann Arbor
Drolett, Fred J. ... Lansing
Drolett, Lawrence ... (M) Lansing
Dunn, F. C. ... Lansing
Dunn, F. M. ... Lansing
Ellis, Bertha W. ... Lansing
Ellis, C. W. ... Lansing
Feeney, Kenneth J. ... Lansing
Finch, Russell L. ... Lansing
Fisher, D. W. ... (M) Lansing
Fosget, Wilbur W. ... Lansing
Foust, E. H. ... Lansing
French, Horace L. ... Lansing
Galbraith, Dugald A. ... Lansing
Gardner, C. B. ... Lansing
Gibson, T. E. ... (M) Lansing
Goldner, R. E. ... (M) Lansing
Gunderson, G. O. ... Lansing
Harris, Dean W. ... Lansing
Harris, Herbert W. ... (M) Lansing
Harrold, J. F. ... (M) Lansing
Hart, L. C. ... Lansing
Heald, Gordon H. ... (M) Wyandotte
Heckert, Frank B. ... Lansing
Heckert, J. K. ... Lansing
Hendren, Owen S. ... (M) Williamston
Henry, L. L. ... Lansing
Higgins, E. P. ... (M) Unknown
Himmelberger, R. J. ... (M) Lansing
Hodges, Kenneth P. ... (M) Lansing
Holland, Charles F. ... East Lansing
Huggett, Clare C. ... (M) Lansing
Hughes, Howard A. ... (M) Coeur d'Alene, Idaho
Huntley, Fred M. ... Lansing
Hurth, M. S. ... Lansing
Isbister, John L. ... (M) Lansing
Johnson, Kenneth H. ... (M) Lansing
Jones, Francis A. ... Lansing
Jones, Francis, Jr. ... Lansing
Kahn, David ... Lansing
Kalmbach, R. E. ... Lansing
Keim, C. D. ... Lansing
Kelly, William H. ... (M) Lansing
Kent, Edith Hall ... Lansing
Kent, Herbert K. ... Lansing
Kenyon, Fanny H. ... Lansing
Kielhorn, W. P. ... (M) Ft. Smith, Ark.
Klunzinger, Willard R. ... Lansing
Larrabee, E. E. ... Williamston
Le Duc, Don M. ... (M) Lansing
Ley, Wilfred ... (M) Lansing
Lincoln, John L. ... (M) Lansing
Loree, Maurice C. ... Lansing
Lucas, T. H. ... Lansing
Ludlum, L. C. ... Lansing
Markuson, Kenneth E. ... Lansing
Martin, Wayne O. ... Lansing
McConnell, E. G. ... (R) Lansing
McCorvie, C. Ray ... East Lansing
McCoy, Earl M. ... Grand Ledge
McCrumb, R. R. ... Lansing
McElmurry, Leland R. ... Lansing
McElmurry, N. K. ... Lansing
McGillicuddy, Oliver B. ... (M) Lansing

McGillicuddy, Robert J.....(M) Lansing
McIntyre, J. E.....Lansing
McNamara, Edward.....(M) Lansing
McNamara, William E.....Lansing
Meade, Wm. H.....(M) Lansing
Mercer, Walter E.....(M) East Lansing
Meyer, Hugh R.....Lansing
Miller, H. A.....Lansing
Mitchell, A. B.....Lansing
Molnar, S. K.....(M) Lansing
Morrison, C. V.....Lansing
Morrow, R. J.....(M) Lansing
Myers, Victor C.....Lansing
Ochsner, P. J.....Lansing
O'Sullivan, Gertrude.....Mason
Pinkham, R. A.....Lansing
Potter, Earl C.....(M) Lansing
Ponton, J.....Mason
Prall, H. J.....Lansing
Randall, O. M.....Lansing
Rector, Frank L.....Lansing
Richards, F. D.....(M) De Witt
Richardson, M. L.....Lansing
Roberts, Russell.....Ocean City, N. J.
Robson, Edmund J.....(M) Lansing
Rozan, J. S.....Lansing
Rozan, M. M.....(M) Lansing
Russell, Claude V.....(R) Northport
Sander, John F.....(M) Lansing
Schoff, Charles.....Williamston
Seger, Fred L.....Lansing
Shaw, Milton.....Lansing
Shepherd, C. S.....Highland Park
Sherman, George A.....Lansing
Sichler, Harper G.....Lansing
Silverman, Irving E.....(M) Lansing
Smith, Anthony V.....Mason
Smith, H. M.....Lansing
Smith, Irma.....East Lansing
Smith, Lillian R.....Lansing
Snell, Dana M.....Lansing
Snyder, Le Moyne.....Lansing
Spaulding, Thomas.....(M) Lansing
Stanka, Andrew G.....Grand Ledge
Spencer, Perry.....(M) Lansing
Stanley, Arthur L.....(M) Lansing
Steiner, A. A.....(M) Lansing
Steiner, S. D.....Lansing
Stiles, Frank.....(M) Lansing
Strauss, P. C.....Lansing
Stringer, C. J.....Lansing
Swartz, Frederick C.....(M) Lansing
Tamblyn, F. W.....(M) Lansing
Thomas, Lucius G.(M) Winchester, Mass.
Toothaker, Kenneth.....(M) Lansing
Town, F. R.....Lansing
Towne, Lawrence C.....Lansing
Trescott, R. F.....(M) Lansing
Trimby, Robert H.....Lansing
Troost, F. L.....Holt
Vander Slice, E. R.....Lansing
Vander Zalm, T. P.....(M) Lansing
Venier, Joseph.....Lansing
Wadley, Ralph.....Lansing
Webb, Roy O.....(M) Okemos
Welch, William H.....Lansing
Wellman, John M.....(M) Lansing
Wetzel, John O.....Lansing
Wilensky, Thomas.....Lansing
Wiley, Harold W.....Lansing
Willson, Howard S.....Lansing
Wilson, Harry A.....Lansing

Ionia-Montcalm Counties

Bird, Wm. L.....Greenville
Botting, A. J.....Portland
Bracey, L. E.....Sheridan
Bunce, E. P.....Trufant
Cook, George H.....Caro
Dunkin, Lloyd S.....(M) Greeenville
Fleming, J. C.....Pewamo
Fox, Harold M.....Portland
Geib, O. P.....Carson City
Hansen, Carl M.....(M) Stanton
Hansen, M. M.....Greenville
Haskell, Robert H.....Northville
Hoffs, M. A.....Lake Odessa
Hollard, A. E.....Belding
Johns, Joseph J.....Ionia
Kelsey, L. E.....Lakeview
Kling, V. F.....(M) Michigan City, Ind.
Lilly, Isaac S.....Stanton
Marston, L. L.....(M) Lakeview
McCann, John J.....Ionia
Michmerhuizen, Robert E.....(M) Belding
Murawa, V. J.....Ionia
Norris, Wm. W.....(M) Japan
Peabody, C. H.....Lake Odessa
Pankhurst, C. T.....Ionia
Robertson, P. C.....Ionia
Seidel, Karl E.....(M) Ionia
Slagh, Milton E.(M) Round Lake, Minn.
Socha, Edmund S.....Ionia
Swift, E. R.....Lakeview
VanDuzen, V. L.....Belding
VanLoo, J. A.....(M) Belding
Weaver, Harry B.....Greenville
Whitten, R. R.....Ionia

Jackson County

Ahronheim, J. H.....(M) Jackson
Alter, R. H.....Jackson
Anderson, W. B.....Jackson
Appel, S.....(M) Jackson
Baker, G. M.....Parma
Bartholic, F. W.....(M) Homer
Beckwith, S. A.....Stockbridge
Bullen, G. R.....Jackson
Chabut, H. M.....Jackson
Clarke, C. S.....Jackson
Cochrane, Wayne A.....Jackson
Cooley, Randall M.....Jackson
Corley, C.....Jackson
Corley, Ennis.....Jackson
Cox, Ferdinand.....Jackson
Crowley, Edward D.....(M) Jackson
Culver, Guy D.....Stockbridge
Dailey, Byrne.....(M) Detroit
DeMay, C. E.....Jackson
DeMay, John.....(M) Texas
Dengler, C. R.....Jackson
Durocher, Normand E.....(M) Jackson
Edmonds, J. M.....(M) Tuba City, Ariz.
Enders, W. H.....Jackson
Filip, H. K.....Jackson
Finton, Max.....(M) Ann Arbor
Finton, Robert E.....(M) S. Carolina
Finton, Walter L.....Jackson
Fisher, Joseph V.....(M) Chelsea
Foust, W. L.....Grass Lake
Gibson, F. J.....Jackson
Glover, H. G.....(R) Jackson
Gordon, D. L.....(M) Jackson
Greenbaum, Harry.....(M) Jackson
Growt, Bowers H.....Addison
Habenicht, Hilda.....Jackson
Hackett, T. E.....Jackson
Hanft, Cyril F.....Springport
Hanna, R. J.....(M) Jackson
Hardie, G. C.....Jackson
Harris, Lester J.....Jackson
Hicks, Glenn C.....Jackson
Holst, John B.....(M) Jackson
Holstein, A. P.....(M) Manchester
Huntley, W. B.....Jackson
Hurley, H. L.....Jackson
Keefer, A. H.....Concord
Kudner, Don F.....Jackson
Lake, Edward C.....(M) Detroit
Lake, William H.....Jackson
Landron, Daniel.....(M) Michigan Center
Lathrop, William W.....(E) Jackson
Leahy, E. O.....Jackson
Lenz, C. R.....(M) Jackson
Leonard, Clyde A.....Jackson
Lewis, E. F.....Jackson
Ludwick, J. E.....(M) Jackson
McGarvey, W. E.....Jackson
McLaughlin, M. J.....Jackson
McLauthlin, Herbert B.(M) Denver, Col.
Meade, Robert.....(M) New Orleans, La.
Meads, J. B.....Jackson
Miller, J. L.....(M) Jackson
Miller, Samuel L.....(M) Jackson
Munro, C. D.....Jackson
Munro, James E.....Jackson
Munroe, Nathan.....(M) Jackson
Murphy, B. M.....(M) Jackson
Newton, R. E.....Jackson
Oleksy, S.....(M) Jackson
O'Meara, James J.....Jackson
Otis, Grant L.....(M) Jackson
Payne, Andrew K.....Jackson
Phillips, G.....Jackson
Pier, C. T.....Jackson
Porter, H. W.....Jackson
Pray, Frank F.....Jackson
Pray, G. R.....Jackson
Quirk, Edmund J.....Chelsea
Ransom, F. G.....Jackson
Rice, John W.....(M) Jackson
Riley, Philip A.....Jackson
Roberts, Arthur J.....(E) Jackson
Sargent, Leland E.....(M) Jackson
Sautter, Wm.....(M) Unknown
Schepeler, C. W.....Brooklyn
Schmidt, T. E.....Jackson
Scott, John A.....(M) Jackson
Seybold, Edward G.....(M) Ann Arbor
Shaeffer, A. M.....Jackson
Sill, Henry W.....Jackson
Sirhal, Alfred M.....(M) Brooklyn
Smith, Dean W.....Jackson
Speck, John W.....Jackson
Southwick, W. A.....(M) Springport
Stewart, L. L.....Jackson
Sugar, Samuel.....(M) Jackson
Susskind, M. V.....(M) Jackson
Tate, Cecil E.....(M) Jackson
Thayer, E. A.....Jackson
Thalner, L. F.....Jackson
Thompson, Tom.....Jackson
Torwick, E. T.....Jackson
Townsend, J. W.....Vandercook Lake
Van Schoick, J. D.....Hanover
Van Shoick, Frank.....Jackson
Van Wagnen, F. I.....(M) Jackson
Vivirski, Edward E.....(M) Jackson
Wallace, Warren S.....(M) Jackson
Wholihan, John W.....Michigan Center
Wickham, W. A.....(M) Jackson
Wilson, N. D.....Jackson
Winter, G. E.....Jackson

Kalamazoo County

Aach, Hugo.....(M) Kalamazoo
Anderson, K. A.....Kalamazoo
Alexander, C. A.....Kalamazoo
Andrews, Sherman.....(M) Memphis, Tenn.
Armstrong, Robert J.....Kalamazoo
Banner, Lawrence R.....Kalamazoo
Barnebee, J. W.....Kalamazoo
Behan, Gerald W.....Galesburg
Benjamin, Margaret.....Kalamazoo
Bennett, C. L.....Kalamazoo
Bennett, Keith.....(M) Kalamazoo
Berry, J. F.....Kalamazoo
Birch, William.....(M) Kalamazoo
Bodmer, H. C.....Kalamazoo
Borgman, Wallace.....(M) Kalamazoo
Boys, C. E.....Kalamazoo
Brown, I. W.....Kalamazoo
Cobb, Horace R.....Kalamazoo
Cook, R. G.....Kalamazoo
Crane, W. B.....Kalamazoo
Crawford, Kenneth.....(M) Kalamazoo
Dahlstrom, Doris.....Kalamazoo
DenBleyker, Walter.....Kalamazoo
DeWitt, L. H.....Kalamazoo
DeWitt, Norman.....(M) Kalamazoo
Dowd, B. J.....(M) Kalamazoo
Doyle, F. M.....(M) Kalamazoo
Ertell, Wm. F.....Kalamazoo
Fast, R. B.....Kalamazoo
Fopeano, John V.....(M) Unknown
Fulkerson, C. B.....Kalamazoo
Fuller, R. T.....Kalamazoo
Fuller, Paul.....(M) Kalamazoo
Gerstner, Louis.....Kalamazoo
Gilding, Joseph.....(M) Vicksburg
Goodhue, Lolita.....Kalamazoo
Grant, Frederick E.....Kalamazoo
Green, William.....Kalamazoo
Gregg, U. Sherman.....Kalamazoo
Heersma, H. S.....Kalamazoo
Hildreth, R. C.....Kalamazoo
Hodgman, Albert B.....(M) Kalamazoo
Hoebeke, William G.....Kalamazoo
Holder, Charles.....(M) Kalamazoo
Howard, H. S.....Kalamazoo

Howard, W. H.....Galesburg
Hubbell, R. J.....Kalamazoo
Huyser, William C.....Kalamazoo
Irwin, Wm. D.....(M) Kalamazoo
Jackson, Howard C.....(M) Kalamazoo
Jackson, John B.....Kalamazoo
Jennings, W. O.....Kalamazoo
Kavanaugh, Wm. R.....(M) Kalamazoo
Kenzie, W. N.....Richland
Klerk, W. J.....(M) Kalamazoo
Koestner, Paul.....(M) Kalamazoo
Kuhs, Milton L.....(M) Kalamazoo
Lambert, R. H.....Kalamazoo
Lang, W. W.....Kalamazoo
Lavender, Howard.....Kalamazoo
Light, Richard Upjohn.....Kalamazoo
Light, S. Rudolph.....Kalamazoo
Littig, John.....Kalamazoo
MacGregor, J. R.....(M) Parchment
Machin, H. E.....(M) Kalamazoo
Malone, James G.....(M) Kalamazoo
Margolis, Frederick J.....Kalamazoo
Marshall, Don.....(M) Kalamazoo
Marshall, Evelyn W.....Kalamazoo
McCarthy, J. S.....Kalamazoo
McIntyre, Charles H.....(M) Kalamazoo
McNabb, A. A.....Kalamazoo
Moe, Carl Rex.....(M) Kalamazoo
Morter, Roy A.....Kalamazoo
Nell, Edward R.....(M) Kalamazoo
Nibbelink, Benjamin.....Kalamazoo
Okun, M. H.....(M) Kalamazoo
Olney, H. E.....Leonidas
Patmos, Martin.....(M) Kalamazoo
Pearson, Edwin O.....Kalamazoo
Peelen, J. W.....(M) Kalamazoo
Peelen, Matthew.....(M) Kalamazoo
Perry, Clifton.....Kalamazoo
Prentice, Hazel R.....Kalamazoo
Prothro, W. B.....Kalamazoo
Rasmussen, Leo.....Vicksburg
Reno, Joseph H.....Kalamazoo
Rigterink, G. H.....(M) Kalamazoo
Rockwell, Donald C.....Kalamazoo
Ryan, F. C.....(M) Kalamazoo
Sage, Edward D.....Kalamazoo
Scholten, D. J.....Kalamazoo
Scholten, Wm.....Kalamazoo
Schrier, C. T.....(M) Kalamazoo
Schrier, Paul.....(M) Kalamazoo
Schrier, Thomas.....(M) Comstock
Scott, Wm. A.....(M) Kalamazoo
Shook, R. W.....(M) Kalamazoo
Siemsen, W. J.....(M) Kalamazoo
Simpson, B. W.....Kalamazoo
Simson, Clyde B.....(M) Kalamazoo
Sisk, W. E.....Kalamazoo
Snyder, Roscoe F.....Kalamazoo
Sofen, Morris B.....(M) Kalamazoo
Stiller, A. F.....Kalamazoo
Southworth, M. N.....(M) Schoolcraft
Stryker, Homer H.....Kalamazoo
Treshler, H. J.....Oshtemo
Upjohn, E. G.....Kalamazoo
Upjohn, L. N.....Kalamazoo
Van Urk, Thomas.....Kalamazoo
Verhage, Martin D.....(M) Kalamazoo
Volderauer, John C.....(M) Chicago, Ill.
Walker, Burt D.....Kalamazoo
Wescott, L. E.....Kalamazoo
Wilbur, E. P.....Kalamazoo
Williamson, Edwin M.....Kalamazoo
Youngs, A. S.....Kalamazoo
Youngs, C. A.....Kalamazoo
Zolen, Margaret.....Kalamazoo

Kent County

Adams, F. A.....(M) Grand Rapids
Aitken, George T.....(M) Grand Rapids
Alfenito, Felix S.....(M) Grand Rapids
Allen, R. V.....Grand Rapids
Aston, William.....(M) Grand Rapids
Avery, Noyes L.....(M) Grand Rapids
Baert, George H.....Grand Rapids
Baker, Abel J.....Grand Rapids
Ballard, M. S.....Grand Rapids
Balyeat, Gordon W.....(M) Grand Rapids
Barris, Ralph W.....(M) West Virginia
Beaton, James H.....(M) Grand Rapids
Beeman, Carl B.....(M) Grand Rapids
Beeman, C. E.....Grand Rapids
Beets, W. Clarence.....(M) Grand Rapids
Bell, Charles M.....(M) Grand Rapids
Bergsma, Stuart.....Grand Rapids
Bettison, William L.....(M) Grand Rapids
Billings, Elton.....Grand Rapids
Blackburn, Henry M.....Grand Rapids
Blocksma, Ralph.....(M) Grand Rapids
Bloxsom, P. W.....Grand Rapids
Boelkins, Richard C.....(M) Grand Rapids
Boet, F. A.....Grand Rapids
Boet, John.....(M) Grand Rapids
Bosch, L. C.....Grand Rapids
Brace, Fred.....(M) Grand Rapids
Brayman, C. W.....Cedar Springs
Brink, Russell.....(M) Grand Rapids
Brook, Jacob D.....Grandville
Brotherhood, J. S.....Grand Rapids
Browning, Eugene.....Grand Rapids
Buesing, O. R.....(M) Unknown
Buist, S. J.....Grand Rapids
Bull, Frank L.....Sparta
Burleson, John S.....Grand Rapids
Burling, Wesley M.....Grand Rapids
Burroughs, Frank.....(M) Overseas
Butler, Wm. J.....Grand Rapids
Byers, Earl J.....Grand Rapids
Byrd, Mary Lou.....Grand Rapids
Campbell, Alexander M.....Grand Rapids
Carpenter, L. C.....(M) Grand Rapids
Chadwick, W. L.....(M) Denver, Colo.
Chamberlain, L. H.....Grand Rapids
Chandler, Donald.....Grand Rapids
Claytor, R. W.....Grand Rapids
Collisi, H. S.....(M) Grand Rapids
Colvin, W. G.....(M) Grand Rapids
Corbus, B. R.....Grand Rapids
Crane, Charles V.....Grand Rapids
Crane, Harold D.....(M) Grand Rapids
Cuncannan, M. E.....Grand Rapids
Dales, Ernest W.....Grand Rapids
Damstra, H. J.....(M) Grand Rapids
Davis, D. B.....(M) Grand Rapids
Dawson, Douglas.....(M) Grand Rapids
Dean, Alfred W.....Grand Rapids
DeBoer, Clarence J.....(M) Grand Rapids
DeBoer, Guy Wm.....(M) Grand Rapids
DeMaagd, Gerald.....Rockford
DeMol, Richard J.....Grand Rapids
Denham, R. H.....Grand Rapids
Denham, Robert H., Jr.....(M) Ann Arbor
De Pree, Isla G.....Grand Rapids
De Pree, Joseph.....Grand Rapids
Devel, Leon.....(M) Grand Rapids
DeVries, Daniel.....(M) Augusta, Ga.
Dewar, M. M.....Grand Rapids
Dewey, Kent A.....Grand Rapids
De Young, T.....Sparta
Dick, Mark W.....(M) Grand Rapids
Diskey, Donald.....Grand Rapids
Dixon, Willis L.....Grand Rapids
Doran, Frank L.....Grand Rapids
Droste, James C.....Grand Rapids
Ducey, Edward F.....Grand Rapids
Duiker, Henry.....Grand Rapids
Deurloo, H. W.....(M) Godwin Heights
Eaton, Robert M.....(M) Grand Rapids
Eggleston, H. R.....Grand Rapids
Failing, John F.....(M) Grand Rapids
Fannoff, Fred L.....Grand Rapids
Farber, Charles E.....(M) Grand Rapids
Faust, L. W.....Grand Rapids
Fellows, Kenneth E.....(M) Grand Rapids
Ferguson, James.....(M) Ann Arbor
Ferguson, Lynn A.....Grand Rapids
Ferguson, Ward S.....Grand Rapids
Ferrand, L.....(M) Rockford
Fitts, Ralph L.....(M) Grand Rapids
Flynn, J. D.....(M) Grand Rapids
Foshee, J. C.....Grand Rapids
Freyling, Robert.....(M) Unknown
Fuller, E. H.....Grand Rapids
Gaikema, E. W.....Grand Rapids
Gibbs, F. F.....Grand Rapids
Gilbert, R. H.....Grand Rapids
Gillette, Frederics.....(M) Grand Rapids
Grant, Lee O.....Grand Rapids
Grant, Lucile.....Grand Rapids
Grass, Edward J.....(M) Grand Rapids
Gravbiel, George.....Caledonia
Griffith, L. S.....(M) Grand Rapids
Haeck, William.....(M) Grand Rapids
Hagerman, D. B.....Grand Rapids
Hammond, T. W.....(R) Grand Rapids
Hayes, L. W.....Howard City
Heetderks, Dewey.....Grand Rapids
Henry, James, Jr.....Grand Rapids
Herrick, Ruth.....Grand Rapids
Hill, A. Morgan.....(M) Grand Rapids
Hodgen, J. T.....Grand Rapids
Holcomb, J. W.....Grand Rapids
Holdsworth, M. J.....(M) Grand Rapids
Holkeboer, Henry D.....Grand Rapids
Hollander, Stephen.....(M) Grand Rapids
Hoogerhyde, Jack.....(M) Grand Rapids
Houghton, G. D.....Caledonia
Hufford, A. R.....Grand Rapids
Hutchinson, Robert J.....Grand Rapids
Hyland, W. A.....Grand Rapids
Ingersoll, C. F.....(M) Grand Rapids
Jack, William.....(M) Grand Rapids
Jellema, J. F.....Grand Rapids
Jameson, Fred M.....(M) Chicago, Ill.
Jaracz, W. J.....Grand Rapids
Jarvis, Charles.....Grand Rapids
Kelly, Robert E.....(M)
Kemmer, Thomas R.....Grand Rapids
Kendall, Eugene L.....Grand Rapids
Klaus, C. D.....(M) Grand Rapids
Kniskern, P. W.....(M) Grand Rapids
Kooistra, Henry P.....Grand Rapids
Koon, William D.....(M) Grand Rapids
Koontz, E. R.....(M) Grand Rapids
Kremer, John.....Grand Rapids
Kreulen, H. J.....Grand Rapids
Kriekard, P. J.....Grand Rapids
Laird, Robert G.....Grand Rapids
Lamb, George F.....Grand Rapids
Lanning, N. E.....Grand Rapids
Lawrence, Howard C.....Grand Rapids
Lentini, Joseph R.....(M) Grand Rapids
Le Roy, Simeon.....Grand Rapids
Lieffers, Harry.....Grand Rapids
Lindenfeld, Frederick H.....(M) Grand Rapids
Logie, James W.....Grand Rapids
Lyman, William D.....Grand Rapids
MacDonald, Allen.....(M) Lowell
Mac Donnell, James A.....(M) Lowell
Marrin, M. M.....(M) Grand Rapids
Marsh, J. P.....Grand Rapids
Martin, A. M.....Grand Rapids
Maurits, Reuben.....Grand Rapids
McCandliss, Robert.....Grand Rapids
McCormick, John.....(M) Grand Rapids
McDougal, Wm. J.....Grand Rapids
McDougall, Clarice.....Grand Rapids
McKenna, J. L.....(M) Grand Rapids
McKinley, L. M.....Grand Rapids
McRae, John H.....Grand Rapids
Mehney, Gayle H.....Grand Rapids
Miller, J. Duane.....(M) Grand Rapids
Miller, John J.....Marne
Mitchell, H. C.....(M) Grand Rapids
Mitchell, Joseph D., Jr.....Grand Rapids
Mitchell, W. B.....Grand Rapids
Moen, Cornetta G.....Grand Rapids
Moleski, Joseph.....(M) Grand Rapids
Moleski, Leo.....(M) Grand Rapids
Moleski, Stanley.....Grand Rapids
Moll, Arthur M.....Grand Rapids
Morey, Edward C.....Grand Rapids
Mouw, Dirk.....(M) Grand Rapids
Mulder, J. D.....Grand Rapids
Murphy, M. J.....(M) Grand Rapids
Nelson, A. R.....(M) San Francisco, Cal.
Noordewier, Albert.....Grand Rapids
Notier, Victor.....Grand Rapids
Oliver, W. W.....Grand Rapids
Olson, John R.....(M) Grand Rapids
Osborn, Howard.....Grand Rapids
Paalman, Russell J.....(M) Ft. Leavenworth, Kans.
Patterson, P. Wilfred.....Grand Rapids
Payne, C. Allen.....(M) Grand Rapids
Pearson, Glenn A.....Grand Rapids
Pedden, J. R., Jr.....Grand Rapids
Postma, Edward Y.....(M) Grand Rapids
Posthuma, A. E.....Grand Rapids
Posthuma, Millard.....(M) Grand Rapids
Pott, A. L.....(M) Grand Rapids
Pyle, Henry J.....Grand Rapids
Ragsdale, L. V.....Grand Rapids
Ralph, L. Paul.....(M) Grand Rapids
Reed, Torrance.....Grand Rapids
Reus, William F.....Grand Rapids
Rigterink, J. W.....Grand Rapids
Riley, G. L.....Grand Rapids
Robb, Charles S.....Grand Rapids
Roberts, Mortimer E.....Grand Rapids
Robinson, Harold.....Grand Rapids
Rodgers, William L.....Grand Rapids
Rogalski, F. L.....(M) Grand Rapids
Roth, Emil M.....(M) Grand Rapids
Schaubel, Howard J.....(M) Grand Rapids
Schermerhorn, L. J.....Grand Rapids
Schuitema, Donald.....(M) Grand Rapids
Schnoor, E. W.....Grand Rapids
Schnute, Louise F.....Grand Rapids
Sculley, Ray E.....(M) Grand Rapids
Sevensma, Elisha S.....(M) Grand Rapids
Sevey, L. E.....Grand Rapids
Shepard, B. H.....Lowell
Shellman, Millard W.....(M) Grand Rapids
Sherwood, J. Vincent.....Grand Rapids
Sidell, Richard H.....Grand Rapids
Slemons, C. C.....Grand Rapids
Sluyter, J. S.....(M) Grand Rapids
Smith, A. B.....Grand Rapids
Smith, Edwin M.....Grand Rapids
Smith, Ferris N.....Grand Rapids
Smith, R. Earle.....Grand Rapids
Snyder, Clarence.....Grand Rapids
Southwick, G. Howard.....Grand Rapids
Steffensen, W. H.....(M) Grand Rapids

Stonehouse, G. G.....Grand Rapids
Stover, Virgil E.....(M) Grand Rapids
Stuart, Gerhardus.....Grand Rapids
Sugg, Cullen E.....Grand Rapids
Sus Strong, Carl A.....Grand Rapids
Swenson, H. C.....(M) Grand Rapids
Swenson, Leland.....(M) Grand Rapids
Ten Have, J.....Grand Rapids
Tesseine, A. J.....(M) Grand Rapids
Teusink, J. H.....Cedar Springs
Thompson, A. B.....(E) Grand Rapids
Thompson, Athol B.....Grand Rapids
Thompson, Edward.....(M) Grand Rapids
Thompson, P. L.....Grand Rapids
Tidey, Marcus B.....Grand Rapids
Tiffany, Joseph C.....Grand Rapids
Torgerson, Wm. R.....Grand Rapids
Truog, Clarence P.....Grand Rapids
Van Belois, Harvard J.....Grand Rapids
Van Bree, R. S.....Grand Rapids
Vanden Berg, Henry J.....Grand Rapids
Vander Meer, Ray.....(M) Grand Rapids
VanDuine, H. J.....Byron Center
Van Harn, R. S.....Grand Rapids
Vann, N. S.....Grand Rapids
Van Noord, Gelmer A.....Grand Rapids
Van't Hof, A.....(M) Grand Rapids
Van Solkema, Andrew.....Grand Rapids
Van Solkema, Arthur.....(M) Grandville
Van Woerkom, Daniel.....Grand Rapids
Van Zwaluwenberg, Benjamin.....(M) Grand Rapids
Veldman, Harold E.....Grand Rapids
Venema, J. R.....Grand Rapids
Ver Meulen, John.....Grand Rapids
Vis, William R.....Grand Rapids
Vyn, J. D.....Grand Rapids
Webber, Jerome.....(M) Grand Rapids
Wedgewood, L. G.....Grandville
Wells, Merrill.....Grand Rapids
Wenger, Aaron V.....Grand Rapids
Wenger, John N.....Coopersville
Whalen, John.....(M) San Diego, Calif.
Whinery, Joseph B.....Grand Rapids
Whinery, Joseph F.....(M) Grand Rapids
Wiggers, J. R.....Grand Rapids
Willits, P. W.....Grand Rapids
Wilson, Wm. E.....(R) Grand Rapids
Winter, Garrett E.....Grand Rapids
Wright, Thomas E.....Grand Rapids
Wurz, John F.....(M) Grand Rapids
Yegge, J. P.....Kent City

Lapeer County

Best, Herbert M.....Lapeer
Bishop, G. C.....Almont
Burley, David H.....(E) Almont
Chapin, Clarence D.....Columbiaville
Cooper, E. R.....Lapeer
Dorland, Clarke.....(M) Lapeer
Jackson, Carl C.....(M) Texas
McBride, J. R.....(M) Lapeer
Merz, Henry G.....(E) Lapeer
O'Brien, Daniel J.....Lapeer
Rehn, Adolph T.....Lapeer
Smith, G. L.....Imlay City
Thomas, J. Orville.....North Branch
Tinker, F. A.....(E) Lapeer
Zemmer, H. B.....Lapeer
Zolliker, Carl R.....Imlay City

Lenawee County

Abraham, A. O.....Hudson
Blair. Thomas H.....Adrian
Blanchard, L. E.....Hudson
Blanden, Merwin R.....Tecumseh
Campbell, C. A.....(M) Unknown
Colbath, W. E.....Adrian
Claxton, W. T.....(M) Britton
DeRyke, Gilbert R.....Adrian
Hammel, H. H.....(M) Tecumseh
Hardy, P. B.....Tecumseh
Heffron, Howard H.....Adrian
Helzerman, Ralph F.....(M) Tecumseh
Hewes, A. B.....Adrian
Hewes, William.....(M) Adrian
Hinshaw, W. V.....(M) Adrian
Hornsby, W. B.....Clinton
Howland, F. A.....Adrian
Jewett, Wm. E., Jr.....Adrian
Lamley, A. E.....Blissfield
Loveland, Horace H.....Tecumseh
MacKenzie, W. S.....Adrian
McCue, Francis J., Jr.....(M) Adrian
McCue, F. J., Sr.....Hudson
Mac Kenzie, W. S.....Adrian
Marsh, R. G. B.....(M) Tecumseh
Miller, Perry Lynford.....(M) Adrian
Morden, Esli T.....Adrian
Pasternacki, Arthur S.....(M) Adrian
Patmos, Bernard.....(M) Adrian
Raabe, E. C.....Morenci
Rawson, A. P.....(M) Addison
Rogers, J. D.....(M) Adrian
Sayre, Phillip P.....Onsted
Spalding, I. L.....Hudson
Stafford, Leo J.....Adrian
Tubbs, R. V.....Blissfield
Van Dusen, C. A.....Blissfield
Wynn, G. H.....(M) Adrian

Livingston County

Cameron, Duncan A.....(M) Brighton
Coughlin, Florence J.....Howell
Crandell, Claire H.....Howell
Duffy, Ray M.....Pinckney
Finch, E. D.....Howell
Glenn, Bernard H.....Fowlerville
Hayner, R. A.....(M) Kalamazoo
Hendren, J. J.....Fowlerville
Hill, Harold C.....(M) Howell
Huntington, H. G.....Howell
Laboe, Edward W.....Howell
Leslie, G. L.....(M) Howell
Lieber, R. W.....Howell
McGregor, Archie J.....Brighton
McDowell, Guy Marshall.....Howell
Rednor, Daniel J.....Howell
Sigler, Hollis L.....Howell
Stephens, D. C.....(M) Howell
Whitehouse, Walter M.....Howell

Luce County

Adams, DeWitt C.....Newberry
Campbell, Earl H.....Newberry
Gibson, Robert E.....Newberry
Koss, Frank R.....(M) Newberry
Kronquist, Laura D.....Newberry
Lance, Paul E.....Mariette
Purmort, William R., Jr.....Newberry
Spinks, Robert E.....Cadillac
Surrell, Mathew A.....(M) Newberry
Swanson, George F.....(M) Newberry
Tuttle, Jay F.....(M) Falls City, Wash.

Macomb County

Banting, O. F.....(M) Richmond
Barker, John G.....Centerline
Bower, A. B.....Armada
Brady, Milo J.....St. Clair Shores
Buckley, D. J.....Mt. Clemens
Crawford, A. M.....Romeo
Croman, Joseph M., Jr.....Mt. Clemens
Croman, Joseph M., Sr.(E) Mt. Clemens
Dudzinski, Edmund J.(M) New Baltimore
Engels, J. A.....Richmond
Reine, A.....Mt. Clemens
Isbey, Edward K.....Centerline
Juliar, Joseph F.....(M) Mt. Clemens
Kane, Wm. J.....Mt. Clemens
Lane, W. D.....Romeo
La Riviere, J. O.....(M) Mt. Clemens
Lynch, Russell E.....Centerline
Maguire, A. J.....(M) Utica
Moore, G. F.....Mt. Clemens
Mulligan, P. T.....(M) Mt. Clemens
Parker, B. Morgan.....Utica
Reichman, Joseph J.....Mt. Clemens
Reitzel, R. H.....Mt. Clemens
Rivard, Charles L.....(M) St. Clair Shores
Roth, G. E.....(M) Almont
Ruedisueli, Clarence A.....Roseville
Rothman, A. M.....(M) East Detroit
Salot, R. F.....(M) Mt. Clemens
Scher, Joseph N.....(M) Mt. Clemens
Scher, Sydney.....(M) Mt. Clemens
Sibrans, William A.....Sumter, S. C.
Siegfried, E. G.....New Haven
Smith, Milton C.....Mt. Clemens
Stone, Elizabeth A.....(M) Romeo
Sturm, Fred A.....St. Clair Shores
Thompson, A. A.....Mt. Clemens
Ullrich, R. W.....Mt. Clemens
Wellard, Henry C.....(M) New Baltimore
Whitley, Alec.....St. Clair Shores
Wilde, M. M.....Warren
Wiley, D. Bruce.....Utica
Wolfson, Victor H.....Mt. Clemens

Manistee County

Grant, C. L.....Manistee
Hansen, E. C.....(M) Manistee
Harr, R. V.....(M) Santa Rosa, Calif.
Konopa, John F.....(M) Manistee
Lewis, Lee A.....Manistee
Miller, E. B.....Manistee
Norconk, Ward H.....Bear Lake
Oakes, Ellery A.....Manistee
Ogilvie, G. D.....(M) Manistee
Quinn, Henry M.....Copemish
Ramsdell, Homer A.....Manistee
Switzer, Lars W.....Manistee

Marquette-Alger Counties

Bennett, Arthur K.....Marquette
Bennett, M. C.....(M) Marquette
Berry, Robert F.....Marquette
Bertucci, J. P.....Ishpeming
Burke, R. A.....Negaunee
Bottum, Charles N.....Marquette
Casler, W. L.....Marquette
Cooperstock, M.....Marquette
Corcoran, W. A.....Ishpeming
Drury, Chas. P.....Marquette
Elzinga, E. R.....Marquette
Erickson, Arvid W.....Ishpeming
Fennig, F. A.....(M) Marquette
Hanelin, H. A.....(M) Chicago, Ill.
Hartt, P. P.....Ishpeming
Hirwas, C. L.....Marquette
Hornbogen, D. P.....(M) Marquette
Howe, L. W.....Marquette

Janes, R. Grant.....(M) Detroit
Keskey, George I.....Marquette
Lambert, W. C.....(M) Marquette
LeGolvan, C.....Marquette
McCann, Neal J.....Marquette
Mudge, W. A.....Negaunee
Narotzky, Archie S.....Ishpeming
Nicholson, J. B.....(M) Marquette
Niemi, O. I.....(M) Marquette
Paine, C. A.....(M) Ishpeming
Schutz, W. J.....(M) Chiscago, Ill.
Schweinsberg, Sara D.....Marquette
Serbst, Charles.....(M) Marquette
Sicotte, Isaiah.....Michigamme
Talso, Jacob.....Ishpeming
Van Riper, Paul.....Champion
Waldie, George McLeod.....Ishpeming
Wickstrom, Geo.....Munising
Williams, R. G.....Ishpeming

Mason County

Blanchette, Victor J.....Scottville
Comodo, Nicholas M.....(M) Ludington
Goulet, L. J.....Ludington
Hoffman, Howard.....(M) Ludington
Hunt, Ivan L.....Scottville
Lintner, Roy C.....Ludington
Martin, Wm. S.....Ludington
Ostrander, R. A.....(M) Ludington
Paukstis, Charles.....Ludington
Scott, Robert R.....(M) Ludington

Mecosta-Osceola-Lake County

Bruggema, Jacob.....Evart
Chess, Leo F.....Reed City
Franklin, Benjamin L.....Remus
Ivkovich, Paul.....(M) Reed City
Kilmer, Paul B.....Reed City
Klein, J. Paul.....(M) Reed City
MacIntyre, Donald.....Big Rapids
McGrath, V. J.....Reed City
Merlo, F. A.....Big Rapids
Peck, Louis K.....Lake City
Phillips, R. W.....(M) Remus
Treynor, Thomas P.....Big Rapids
White, J. A.....Big Rapids
Yeo, Gordon H.....Big Rapids

Menominee County

Brukhardt, Herman R.....(M) Menominee
DeWane, F. J.....Menominee
Flanagan, Clarence B.....Menominee
Glickman, L. G.....(M) Menominee
Heidenreich, John R.....(M) Daggett
Jones, Wm. S.....Menominee
Kaye, J. T.....Menominee
Kerwell, K. C.....Stephenson
Peterson, A. R.....Daggett
Sanford, Joseph.....Stephenson
Sawbridge, Edward.....(E) Stephenson
Sethney, Henry T.....Menominee
Sethney, Walter F.....(M) Tulsa, Okla.
Towey, J. W.....Powers

Midland County

Ballmer, Robert S.....Midland
Bowsher, Robert E.....(M) Midland
Bulmer, Daniel J.....(M) Midland
Buskirk, Maurice D.....(M) Midland
Gay, Harold Howard.....Midland
Gordon, Harold L.....(M) Midland
Grewe, N. C.....Midland
Hautau, Emily.....Midland
Linsenmann, Karl W.....Midland
MacCallum, Charles.....Midland
Maynard, W. A.....Coleman
Meisel, Edward H.....(M) Midland
Pike, Melvin H.....Midland
Rice, Robert E.....Midland
Sherk, J. H.....Midland
Sjolander, Gust.....Midland
Towsley, W. D.....Midland
Von Haitinger, Kalmon.....(M) Midland

Monroe County

Acker, Wm. F.....Monroe
Ames, Florence.....Monroe
Balk, A. C.....Monroe
Barker, Vincent L.....(M) Monroe
Blakey, L. C.....Monroe
Bond, W. W.....(M) Monroe
Brancheau, L. T.....(M) Petersburg
Cohen, H. Herbert.....(M) Monroe
Denman, D. C.....(M) Maywood, Calif.
Dusseau, S. V.....(E) Erie
Ewing, R. T.....Monroe
Fieldhouse, B. J.....Lansing, Illinois
Flanders, J. P.....(M) Monroe
Gelhaus, Wm. J.....Monroe
Golinvaux, C. J.....Monroe
Goodman, Louis.....(M) Detroit
Heffernan, John F.....Carleton
Hensel, Hilda.....Monroe
Humphrey, J. A.....Monroe
Hunter, M. A.....Monroe
Johnson, A. Esther.....Monroe
Landon, Herbert W.....Monroe
Lindquist, Paul A.....(M) Alaska
Long, Edgar C.....(M) Monroe
Long, Sara.....Monroe
Mather, C. B.....(M) Monroe
McDonald, T. A.....Monroe
McGeoch, R. W.....Monroe
McMillin, J. H.....Monroe
Meck, H. L.....Dundee
Medlar, Robert.....(M) Monroe
Newcomer, Sheldon R.....Monroe
Parmelee, O. E.....Lambertville
Pinkus, Hermann.....Monroe
Reisig, A. H.....(M) Monroe
Sanger, Emerson J.....Monroe
Tomlinson, Ledyard.....Newport
Vaughn, Morley S.....Carleton
Wagar, Spencer.....Rockwood
Williams, Robert J.....(M) Monroe
Williamson, George W.....Dundee

Muskegon County

Anderson, A. J.....Muskegon
Anderson, Axel W.....Muskegon
August, R. V.....Muskegon Hts.
Barnard, Helen.....Muskegon
Bate, L. C.....Muskegon
Beers, Charles.....Muskegon Hts.
Benedict, A. L.....(M) Muskegon
Bloom, C. J.....Muskegon
Boyd, D. R.....Muskegon
Boyd, John.....(M) Muskegon
Bradshaw, Park S.....Muskegon
Chapin, William S.....Muskegon Hts.
Christophersen, J. W.....(M) Muskegon
Clapp, H. W.....(M) Muskegon
Closz, H. F.....Muskegon
Cohan, Sol G.....Muskegon
Dasler, A. F.....(M) Unknown
Derezinski, Clement F.....Muskegon
Diskin, Frank.....(M) Muskegon
Douglas, Robert.....(M) Muskegon
Durham, C. J.....Muskegon
Dykhuisen, Harold D.....Muskegon
Eckerman, C. T.....Muskegon
Fillingham, Enid.....Muskegon
Fleischman, C. B.....Muskegon
Fleishman, Norman.....(M).... Muskegon
Foss, Edward O.....Muskegon
Garber, F. W., Jr.....Muskegon
Garland, J. O.....Muskegon
Gillard, James.....(M) Muskegon
Griffith, Robert M.....(M) Muskegon
Hagen, William A.....Muskegon
Hannum, F. W.....Muskegon
Harrington, A. F.....Muskegon
Hartwell, S. W.....(M) Muskegon
Heneveld, Edw. H.....(M) Muskegon
Heneveld, John.....Muskegon
Holly, Leland E.....Muskegon
Holmes, Roy Herbert.....(M) Muskegon
Kane, Thomas J.....(M) Muskegon
Kay, Cecilia.....Muskegon
Keilin, Marie.....Muskegon
Kerr, H. J.....(M) Muskegon
Lange, E. W.....Muskegon
Lauretti, Emil.....Muskegon
Laurin, V. Samuel.....Muskegon
LeFevre, Louis.....(M) Muskegon
LeFevre, William M.....Muskegon
Loder, Leonel Lewis.....Muskegon
Loomis, John L.....Muskegon
Mandeville, C. B.....Muskegon
Medema, Paul.....Muskegon
Meengs, M. B.....(M) Muskegon
Miller, Philip L.....(M) Muskegon
Morford, F. N.....Muskegon
Mulligan, A. W.....Muskegon
Oden, Constantine L.....Muskegon
Petkus, Antonie.....Muskegon Hts.
Pettis, Emmett.....Muskegon
Powers, Lunette.....Muskegon
Price, Leonard.....(M) Unknown
Pyle, H. J.....Muskegon
Risk, Robert A.....Muskegon
Risk, Robert D.....(M) Muskegon Hts.
Scholle, N. W.....(M) Muskegon
Ryan, Wm. J. J.....Muskegon
Sears, Richard.....Muskegon
Swartout, W. C.....Muskegon
Teifer, Charles A.....Muskegon
Thieme, S. W.....Ravenna
Thornton, E. S.....Muskegon
Wagenaar, R. H.....(M) Muskegon
Wiersma, Silas C.....Muskegon
Wilke, C. A.....Montague
Wilson, P. S.....Muskegon

Newaygo County

Deur, T. R.....Grant
Geerlings, Lambert.....Fremont
Geerlings, Willis.....Fremont
Moore, H. R.....Newaygo
O'Neill, J. W.....White Cloud
Stryker, O. D.....Fremont
Tompsett, Arthur C.....Hesperia

Northern Michigan

Beuker, Bernard J. ... East Jordan
Blum, Benjamin B. ... (M) Petoskey
Burns, Dean C. ... Petoskey
Chapman, Willis ... (E) Cheboygan
Conkle, Guy C. ... Boyne City
Conti, Joseph ... (M) Petoskey
Conway, Wm. S. ... (M) Petoskey
Duffie, Don Hastings ... Central Lake
Frank, Gilbert E. ... Harbor Springs
Gervers, J. H. R. ... Bellaire
Giffords, Mark ... (M) Los Angeles, Calif.
Hegener, A. J. ... Petoskey
Larson, Walter E. ... Cheboygan
Lashmet, Floyd H. ... Petoskey
Lentini, Nicholas ... Cheboygan
Lilga, Harris V. ... (M) Petoskey
Litzenburger, A. F. ... Boyne City
Mast, W. H. ... Petoskey
Mayne, Frederick C. ... Cheboygan
McCune, Wm. Stanley ... (M) District of Columbia
McLeod, M. M. ... Sanford, N. C.
McMillan, Fraley ... Charlevoix
Palmer, Russell ... St. James
Parks, W. H. ... Petoskey
Rodgers, John ... Bellaire
Saltonstall, G. B. ... Charlevoix
Stringham, J. R. ... Cheboygan
Van Dellen, Jerrian ... E. Jordon
Weberg, Kathryn ... Petoskey
Wood, George ... Onaway

Oakland County

Abbott, V. C. ... (M) Pontiac
Arnkoff, Harry ... Pontiac
Aschenbrenner, Z. R. ... Farmington
Baker, Frederick A. ... Pontiac
Baker, Robert H. ... Pontiac
Barker, Howard B. ... Pontiac
Barrow, Winona M. ... Royal Oak
Bauer, Edward G. ... Pontiac
Bauer, Ernest W. ... Hazel Park
Beattie, W. G. ... Ferndale
Beck, Otto O. ... Birmingham
Benning, C. H. ... (M) Royal Oak
Berg, Richard H. ... Oxford
Berkaw, Kenneth H. ... Birmingham
Blue, Jane ... Pontiac
Borland, Alexander ... Pontiac
Boucher, R. E. ... (M) Royal Oak
Bourg, Donald J. ... Royal Oak
Burke, Chauncey G. ... Pontiac
Butler, Samuel A. ... Pontiac
Calhoun, Ethel T. ... Birmingham
Campbell, Malcolm D. ... (M) Royal Oak
Christie, E. A. ... Pontiac
Christie, J. W. ... (M) Pontiac
Cobb, Leon F. ... Pontiac
Cobb, Thomas H. ... Pontiac
Cooper, Robert J. ... (M) Pontiac
Crissman, Harold C. ... Ferndale
Cudney, Ethan B. ... Pontiac
Dahlgren, Carl ... Keego Harbor
Darling, C. G., Jr. ... Pontiac
Dobski, Edwin J. ... (M) Pontiac
Ekelund, Clifford T. ... Pontiac
Farnham, Lucius Augustine ... Pontiac
Faulconer, Albert ... (M) Rochester
Ferris, Ralph G. ... Birmingham
Fitzpatrick, Francis ... Pontiac
Flick, Earl J. ... (M) Royal Oak
Flick, John R. ... Royal Oak
Foust, Earl W. ... (M) Hazel Park
Francis, Donald ... (M) Pontiac
Furlong, Harold A. ... (M) Pontiac
Gaensbauer, Ferdinand ... Pontiac
Gariepy, Bernard F. ... Royal Oak
Gatley, C. R. ... (M) Pontiac
Gatley, L. Warren ... Pontiac
Geib, Ormond D. ... Rochester
Gehringer, Norman F. ... (M) Pontiac
Gerls, Frank B. ... Pontiac
Gibson, Wellington C. ... Milford
Gill, Matthew J. ... (M) Pontiac
Gordon, J. H. ... Birmingham
Grant, William A. ... Milford
Grate, L. ... (M) Pontiac
Green, Wm. M. ... Pontiac
Hackett, Daniel Jos. ... Pontiac
Haddock, D. A. ... Walled Lake
Halsted, Lee H. ... Farmington
Hammonds, E. E. ... (M) Birmingham
Harvey, Campbell ... Pontiac
Hasner, R. B. ... Royal Oak
Hassberger, J. B. ... (M) Birmingham
Hathaway, Clarence L. ... Lake Orion
Hathaway, William ... Rochester
Henry, Colonel R. ... Ferndale
Hensley, C. B. ... Lake Orion
Howlett, E. V. ... Pontiac
Hoyt, D. F. ... (M) Pontiac
Hubert, John R. ... (M) Pontiac
Hume, T. W. K. ... Auburn Hts.
Hunt, Homer H. ... Pontiac
Hurst, Daniel D. ... Pleasant Ridge
Hutchinson, W. G. ... Bloomfield Hills
Kemp, Felix J. ... Pontiac
Kemp, W. Lloyd ... Birmingham
Kimball, A. S. ... Pontiac
Koehler, William H. ... Royal Oak
Lambie, John S. ... Birmingham
Lambert, Alvin Gerald ... Ferndale
Larson, B. T. ... Pontiac
Lass, E. H. ... (M) Oxford
Lewis, S. M. ... Ferndale
Little, J. W. ... (M) Pontiac
Lockwood, C. E. ... Holly
MacKenzie, O. R. ... Walled Lake
Margrave, Edmund C. ... Royal Oak
Markley, John Martin ... (M) Pontiac
Mason, Robert J. ... (M) Birmingham
McConkie, J. P. ... Birmingham
McEvoy, Francis J. ... (M) Royal Oak
McNeill, H. H. ... Pontiac
Mehas, C. P. ... Pontiac
Meinke, Herman A. ... Hazel Park
Mercer, Frank A. ... Pontiac
Merrill, Lionel N. ... Royal Oak
Mershon, R. B. ... Royal Oak
Mitchell, B. M. ... Pontiac
Monroe, John D. ... Pontiac
Neafie, Chas. A. ... Pontiac
Newcomb, Arnold B. ... Berkley
Norup, John ... Berkley
Nosanchuk, Joseph ... (M) Pontiac
Ohlmacher, A. P. ... (M) Royal Oak
Olsen, Richard E. ... (M) Pontiac
Palmer, Fred W. ... Pontiac
Pauli, Theodore H. ... (M) Pontiac
Pelletier, Charles J. ... (M) Hazel Park
Pool, H. H. ... Pontiac
Porritt, Ross J. ... (M) Pontiac
Ports, Preston W. ... Farmington
Prevette, Isaac C. ... Pontiac
Raynale, George P. ... Birmingham
Reid, Fred T. ... Clawson
Riggs, Harry L. ... Pontiac
Riker, Aaron D. ... Pontiac
Roehm, Harold R. ... Birmingham
Ross, Worth ... Bloomfield Hills
Rowley, Laurie G. ... Drayton Plains
Russell, Vincent P. ... (M) Royal Oak
St. John, Harold A. ... Pontiac
Schlecte, Carl ... (M) Rochester
Schlecte, Eve Mirian ... Rochester
Schoenfeld, John B. ... (M) Bloomfield Hills
Schuneman, Howard ... Ferndale
Seaborn, A. J. ... Royal Oak
Shadley, Maxwell ... (M) Plymouth
Sheffield, L. C. ... Pontiac
Sibley, Harry A. ... Pontiac
Simpson, E. K. ... Pontiac
Smith, Carleton A. ... (M) Pontiac
Smith, Donald S. ... (M) Pontiac
Smith, Ellen ... Pontiac
Spencer, Lloyd H. ... (M) Ferndale
Spoehr, Eugene L. ... Ferndale
Spohn, Earl W. ... (M) Royal Oak
Stahl, Harold F. ... Oxford
Stanley, Wm. F. ... (M) Ferndale
Starker, Clarence T. ... Pontiac
Steinberg, Norman ... Royal Oak
Stofer, Bert E. ... Detroit
Stolpman, A. K. ... (M) Birmingham
Sutton, Palmer E. ... Royal Oak
Swickle, Edward F. ... Royal Oak
Tauber, A. ... Pontiac
Tuck, Raymond G. ... Pontiac
Uloth, Milton J. ... Ortonville
Van Holtern, H. L. ... Pontiac
Wagley, P. V. ... (M) Pontiac
Wagner, Ruth E. ... Royal Oak
Warner, J. F. ... Detroit
Watson, Thomas J. ... (M) Birmingham
Wentz, A. E. ... (M) Birmingham
Young, Arthur R. ... Pontiac

Oceana County

Flint, Charles ... (M) Hart
Hayton, A. R. ... Shelby
Heard, William ... Pentwater
Heysett, N. W. ... Pentwater
Jensen, Viggo ... Shelby
Lemke, Walter M. ... (M) Pennsylvania
Munger, L. P. ... Hart
Nicholson, John H. ... Hart
Robinson, W. Gordon ... (M) Hart
Wood, Merle G. ... Hart

Medical Society of North Central Counties

Ballard, Sylvester L. ... Grayling
Clippert, C. G. ... Grayling
Coulter, Keith D. ... Gladwin
Drescher, George A. ... Lewiston
Egle, Joseph L. ... Gaylord
Harris, Levi A. ... (E) Gaylord
Hendricks, H. V. ... Kalkaska
Jardine, Hugh M. ... West Branch
Keyport, C. R. ... Grayling
Martzowka, M. A. ... Roscommon
McDowell, Douglas B. ... (M) West Branch
McKillop, G. L. ... Gaylord
Palm, Geo. W. ... Prudenville
Peckham, Richard C. ... Gaylord
Stealy, Stanley A. ... Grayling

Ontonagon County

Bender, Jesse L. ... Mass
Easterly, Clay E. ... (M) Ontonagon
Hogue, H. B. ... Ewen
Rubinfeld, S. H. ... (M) Ontonagon
Strong, W. F. ... Ontonagon

Ottawa County

Beernink, E. H. ... Grand Haven
Bloemendaal, D. C. ... Zeeland
Bloemendal, W. B. ... Grand Haven
Boone, Cornelius E. ... Zeeland
Clark, Nelson H. ... (M) Holland
Cook, Carl S. ... (M) Holland
Costello, C. V. ... Holland
DeVries, H. G. ... Holland
DeYoung, Fred ... (M) Spring Lake

Hager, Ralph.....(M) Hudsonville
Hamelink, M. H.....Holland
Harms, H. P.....(M) Holland
Kemme, Gerrit.....Zeeland
Kitchel, John.....Grand Haven
Kitchel, Mary.....Grand Haven
Kools, William C.....Holland
Leenhouts, Abraham.....(E) Holland
Long, C. E.....Grand Haven
Nichols, Rudolph H.....Holland
Nykamp, Russell.....Zeeland
Presley, Wm. J.....Grand Haven
Rypkema, Willard M.....(M) Muskegon
Schrick, Edna C.....Holland
Stickley, A. E.....Coopersville
Ten Have, Ralph.....Grand Haven
Timmerman, E. C.....(M) Coopersville
Van Appledorn, Chester J.....Holland
Van Der Berg, E.....Holland
Van der Velde, O.....Holland
Wells, Kenneth.....(M) Spring Lake
Westrate, William.....Holland
Winter, John K.....Holland
Winter, Wm. G.....(M) Holland
Yonkman, Frederick F.....Holland

Saginaw County

Ackerman, G. L.....(M) Saginaw
Bagley, U. S.....Saginaw
Bagshaw, David E.....Saginaw
Berberovich, T. F.....Saginaw
Bishop, H. M.....(M) Saginaw
Brender, Fred P.....Frankenmuth
Bruton, Martin F.....Saginaw
Bullington, Bert M.....(M) Saginaw
Busch, Frank J.....Saginaw
Butler, M. G.....(M) San Francisco
Button, A. C.....Saginaw
Cady, F. J.....Saginaw
Cameron, Allen K.....Saginaw
Campbell, L. A.....Saginaw
Catizone, R. J.....Merrill
Chisena, Peter R.....(M) Bridgeport
Clark, Wilbert B.....Kenmore, N. Y.
Claytor, Archer A.....Saginaw
Cortopassi, Andre.....Saginaw
Cortopassi, V. E.....(M) Saginaw
Cory, C. W.....(M) Saginaw
Curts, James.....(M) Saginaw
Ely, C. W.....Saginaw
Ernst, Arthur R.....Saginaw
Eymer, Esther.....Saginaw
Fleschner, Thomas E.....Birch Run
Gage, David P.....(M) Saginaw
Galsterer, Edwin C.....Saginaw
Gerber, Herbert.....(M) Saginaw
Goman, Louis D.....Saginaw
Grigg, Arthur.....(E) Saginaw
Grigg, Arthur P.....(M) Saginaw
Hand, Eugene.....(M) Saginaw
Harvie, L. C.....Saginaw
Helmkamp, Herbert O.....Saginaw
Hester, E. G.....(M) Saginaw
Hohn, Fred, Jr.....Saginaw
Howell, Don M.....Saginaw
Imerman, Harold M.....(M) Saginaw
Jaenichen, R.....Saginaw
James, J. W.....(M) Saginaw
Jiroch, R. S.....Saginaw
Jordan, Leo A.....Saginaw
Kemp, J. N.....Saginaw
Kempton, R. M.....Saginaw
Kerr, William.....(M) Saginaw
Kirchgeorg, Clemens G.....Frankenmuth
Kleekamp, H. G.....Saginaw
Klippen, Arthur J.....(M) Saginaw
Kowals, F. V.....Saginaw
LaPorte, L. A.....Saginaw
Ling, Ernest M.....Hemlock
Lohr, O. W.....Saginaw
Longstreet, Martha L.....Saginaw
Luger, F. E.....(M) Saginaw
Lurie, Robert.....(M) Saginaw
Lyle, R. C.....Bridgeport
MacKinnon, Edwin D.....Saginaw
MacMeekin, James W.....(M) Saginaw
Manning, John E.....(M) Saginaw
Markey, Joseph P.....Saginaw
Martzowka, Wm. P.....Saginaw
Matthews, Harry C.....(M) Saginaw
Maurer, John A.....(M) Saginaw
Mayne, Harold.....Saginaw
McKinney, Alex R.....Saginaw
McLandress, Joshua A.....Saginaw
Meyer, Henry J.....Saginaw
Mikan, V. Robert.....Saginaw
Moon, A. R.....Saginaw
Morgrette, Leonard.....(M) Saginaw
Mudd, Richard D.....(M) Texas
Murphy, Albert P.....Saginaw
Murray, Charles R.....(M) Saginaw
Nicholas, Mildred.....Saginaw
Northway, Robert O.....Saginaw
Novy, F. O.....Saginaw
Ostrander, Frank W.....Freeland
Phillips, Homer A.....(M) Saginaw
Pietz, Frederick.....Saginaw
Pillsbury, Edward A.....Frankenmuth
Potvin, Clifford D.....(M) Saginaw
Poole, Frank A.....Saginaw
Richards, Ned W.....(M) Saginaw
Richter, Harry J.....(M) Saginaw
Ryan, M. D.....(E) Saginaw
Ryan, R. S.....(M) Norfolk, Va.
Sample, J. T.....Saginaw
Sargent, D. V.....(M) Saginaw
Schneider, Alexander.....(M) Detroit
Sheldon, S.....(M) Saginaw
Skowronski, Casimer A.....(M) Saginaw
Slack, Walter K.....(M) Saginaw
Stahly, Edward.....Saginaw
Stander, A. C.....(M) Saginaw
Stewart, George W.....(M) Saginaw
Thomas, Dale.....Saginaw
Thompson, A. B.....(M) Saginaw
Tiedke, G. E.....(M) Saginaw
Toshach, C. E.....Saginaw
Wallace, H. C.....(M) Saginaw
Westlund, Norman.....Saginaw
Yntema, S.....(M) Saginaw

Sanilac County

Blanchard, E. W.....Deckerville
Ellis, N. J.....Croswell
Gift, W. A.....Marlette
Hart, R. K.....Croswell
Koch, Donald A.....(M) Ann Arbor
Learmont, H. H.....Croswell
McGunegle, K. T.....Sandusky
Norgaard, Hal V.....Los Angeles, Calif.
Seager, M. Cole.....Brown City
Sebille, Louis J.....(M) Maywood, Ill.
Tweedie, G. Evans.....Sandusky
Tweedie, S. Martin.....Sandusky
Webster, John C.....Marlette

St. Clair County

Armsbury, A. B.....Marine City
Attridge, J. A.....(L) Port Huron
Banting, K. C.....(M) Governors Island, N. Y
Battley, J. C. S.....Port Huron
Beck, Frank K.....Port Huron
Benjamin, Clayton C.....Port Huron
Biggar, R. J.....(M) Port Huron
Borden, C. L.....Port Huron
Boughner, W. H.....Algonac
Bovee, M. E.....Port Huron
Brush, Howard O.....Port Huron
Burke, Ralph M.....Port Huron
Burley Jacob H.....Port Huron
Callery, A. L.....(L) Port Huron
Campbell, R. H.....New York City
Carey, Lewis M.....Detroit
Carney, F. V.....St. Clair
Clyne, B. C.....(M) Yale
Cooper, Thomas H.....Port Huron
DeGurse, T. E.....Marine City
Derck, W. P.....(E) Port Huron
Feldman, Gordon G.....Yale
Fitzgerald, E. W.....(M) Port Huron
Hall, W. E. B.....Port Huron
Holcomb, R. J.....Marine City
Hoyt, Charles M.....(M) Port Huron
Kesl, George Matthew.....Port Huron
Kirker, F. O.....St. Clair
Le Galley, K. B.....(M) Port Huron
Licker, R. R.....(M) Marysville
Ludwig, F. E.....(M) Port Huron
Martin, C. S.....Port Huron
McColl, D. J.....(E) Port Huron
McColl, Neil J.....Port Huron
MacPherson, C. A.....St. Clair
Meredith, E. W.....Port Huron
Novak, Walter S.....Port Huron
Patterson, D. Webster.....Port Huron
Pollock, Donald A.....Yale
Reynolds, Annie E.....Port Huron
Ryerson, W. W.....Port Huron
Schaefer, W. A.....Port Huron
Sites, E. C.....Port Huron
Thomas, C. F.....Port Huron
Treadgold, Douglas.....Port Huron
Ware, John R.....Port Huron
Wass, Henry C.....St. Clair
Waters, George.....Port Huron
Wellman, Joseph E.....Port Huron
Wight, William G.....Yale
Witter, Gordon L.....(M) Red Bank, Cal.

St. Joseph County

Berg, Lawrence A.....(M) Sturgis
Blood, J. V.....Three Rivers
Brunson, A. E.....Colon
Braham, Wilbur.....(M) Sturgis
Dean, Ray E.....Three Rivers
Fiegel, S. A.....(M) Sturgis
Fortner, R. J.....Three Rivers
Gillespie, E.....Sturgis
Hoekman, Aben.....(M) Constantine
Holm, Arvid G.....(M) Three Rivers
Kane, David M.....Sturgis
Miller, C. G.....Sturgis
Parrish, Marion.....Sturgis
Pennington, H. C.....(M) White Pigeon
Penzotti, Stanley.....(M) Three Rivers
Porter, C. G.....Three Rivers
Raisch, Fred J.....(M) White Pigeon
Reed, Fred R.....Three Rivers
Shaw, G. D.....(M) Mendon
Sheldon, J. P.....(M) Sturgis
Slote, L. K.....Constantine
Springer, R. A.....Centerville
Sweetland, G. J.....Constantine
Tesar, F. J.....(M) Centerville
Weir, Dale C.....Three Rivers
Zimont, R. D.....(M) Constantine

Shiawassee County

Arnold, Alfred L., Jr.....Owosso
Arnold, Alfred L., Sr.....(E) Owosso
Backe, John C.....(M) Unknown
Bennett, George W.....Elsie
Blue, J. J.....Owosso
Brandel, J. M.....(M) Illinois
Brown, Richard J.....(M) Owosso
Buzzard, Walter D.....(M) Chesaning
Chipman, E. M.....(M) Owosso

Fillinger, W. B.....Ovid
Harkness, C. A.....Owosso
Hoshal, Vern L.....Durand
Hume, Arthur M.....(E) Owosso
Hume, Harold A.....Owosso
Janci, Julius.....(M) Owosso
Lanting, Helen E.....Owosso
Lanting, Roelof.....(M) Owosso
Linden, V. E.....(M) Durand
McKnight, E. R.....(M) Owosso
Merz, W. L.....Chesaning
Parker, W. T.....Owosso
Pochert, R. C.....Owosso
Richards, C. J.....Durand
Sahlmark, J. F.....Owosso
Shepherd, W. F.....(M) Owosso
Slagh, E. M.....(M) Elsie
Watts, Fred A.....Owosso
Weinkauf, W. F.....Corunna
Weston, C. L.....Owosso
Wilcox, Anna L.....Owosso
Wilcox, C. M.....(M) Owosso

Tuscola County

Barbour, Harry A.....Mayville
Bates, George.....(E) Kingston
Berman, Harry.....Millington
Cook, Raymond.....Akron
Dickerson, Willard W.....Caro
Dixon, Robert L.....Wahjamega
Donahue, Theron.....Cass City
Flett, Richard O.....Millington
Gugino, Frank James.....(M) Reese
Hoffman, T. E.....(M) Vassar
Howlett, R. R.....(M) Caro
Johnson, O. G.....Mayville
Kaven, G. H.....Unionville
Merrill, Elmer H.....Caro
Morris, Frank L.....Cass City
Nigg, Herbert L.....Caro
Ruskin, D. B.....Caro
Savage, Lloyd L.....Caro
Shoemaker, J.....Vassar
Starmann, Bernard.....Cass City
Swanson, E. C.....Vassar
Von Renner, Otto.....(M) Vassar

Van Buren County

Boothby, Carl.....(M) Hartford
Boothby, F. M.....Lawrence
Boothby, Paul R.....Lawrence
Bope, William P.....Decatur
Buckborough, M. W.....So. Haven
Diephuis, Bert.....(M) South Haven
French, M. R.....Paw Paw
Gano, Avison.....(M) Bangor
Giddings, Ralph R.....(M) California
Giffen, John R.....Bangor
Greenman, Newton H.....Decatur
Hall, E. J.....(M) Hartford
Hasty, Willis A.....(M) Grand Rapids
Hoyt, Wilbur F.....(E) Paw Paw
Iseman, Joseph W.....(M) Paw Paw
Itzen, J. F.....South Haven
Maxwell, J. Charles.....Paw Paw
McFadden, R. I.....(M) Bloomingdale
Penoyar, C. L.....South Haven
Spalding, R. W.....Gobles
Steele, Arthur H.....Paw Paw
TenHouten, Charles.....(M) Paw Paw
Terwilliger, Edwin.....(M) Lansing
Urist, Martin J.....South Haven
Young, William R.....Lawton

Washtenaw County

Adcock, John D.....Ann Arbor
Aldrich, Napier S.....(M) Ann Arbor
Alexander, John.....Ann Arbor
Andros, George J.....(M) California
Armstrong, Richard C.....(M) Ann Arbor
Barker, Paul.....Ann Arbor
Barnwell, John.....Washington, D. C.
Barss, Harold D.....Ypsilanti
Bass, Thomas J.....Ypsilanti
Bassow, Paul H.....Ann Arbor
Bauer, Gerhard H.....(M) Ann Arbor
Baugh, R. H.....Ypsilanti
Beebe, Hugh M.....Ann Arbor
Bell, Margaret.....Ann Arbor
Belser, Walter.....Ann Arbor
Bethell, Frank H.....Ann Arbor
Boyer, Philip A.....Ann Arbor
Block, Malcolm L.....Ann Arbor
Brace, William M.....Ann Arbor
Britton, H. B.....Ypsilanti
Bruce, James D.....Ann Arbor
Buscaglia, C. J.....(M) Ypsilanti
Buxton, Robert W.....Ann Arbor
Camp, Carl Dudley.....Ann Arbor
Clements, Glenn T.....(M) Ann Arbor
Coller, Frederick A.....Ann Arbor
Conger, Kyril B.....(M) Honolulu
Conn, Jerome W.....Ann Arbor
Courville, Charles J.....Ann Arbor
Coxon, Alfred W.....Ann Arbor
Cummings, H. H.....Ann Arbor
Cummings, Robert H.....(M) Ann Arbor
Curtis, Arthur C.....Ann Arbor
Day, A. Jackson.....(M) Detroit
deAlvarez-Skinner, Russell (M) Ann Arbor
De Jong, Russell N.....Ann Arbor
DeTar, John S.....Milan
Dingman, Reed O.....Ann Arbor
Donaldson, S. W.....Ann Arbor
Dowman, Charles E.....(M) Ann Arbor
Duff, Ivan F.....(M) Ann Arbor
Engelke, Otto K.....Ann Arbor
Everett, Meldon.....(M) Ann Arbor
Falls, Harold F.....Ann Arbor
Fitzgerald, Thomas D.....(M) Ann Arbor
Forsythe, Warren E.....Ann Arbor
Foster, D. Bernard.....(M) Battle Creek
Fralick, F. Bruce.....Ann Arbor
Francis, Thomas, Jr.....Ann Arbor
Frye, Carl H.....Ann Arbor
Furstenberg, Albert C.....Ann Arbor
Ganzhorn, Edwin C.....Ann Arbor
Gates, John L.....Ann Arbor
Gulde, Andros.....Chelsea
Haas, Reynold L.....Ann Arbor
Hagerman, George W.....(M) Ann Arbor
Haight, Cameron.....Ann Arbor
Hammond, W. W., Jr.....Plymouth
Handorf, Heinrich H.....Northville
Hannum, M. R.....Milan
Harris, Bradley M.....(M) Ypsilanti
Henderson, John W.....Ann Arbor
Henry, L. Dell.....Ann Arbor
High, Howard C.....(M) Ann Arbor
Himler, Leonard E.....Ann Arbor
Hodges, Fred J.....Ann Arbor
Holt, John F.....Ann Arbor
Howard, S. C.....Ann Arbor
Hunt, Homer H.....(M) Unknown
Hunt, Robert E.....Ann Arbor
Jenkins, Daniel E.....Ann Arbor
Jimenez, Buenaventura.....Ann Arbor
Johnson, Lester J.....(M) Ann Arbor
Johnson, Sture A. M.....Ann Arbor
Johnston, Franklin D.....Ann Arbor
Jordan, Paul H.....(M) Unknown
Kahn, Edgar A.....(M) Ann Arbor
Kamby, Arnold H.....(M) Maryland
Keller, Arthur P.....(M) Ann Arbor
Kemper, J. W.....Ann Arbor
Kiehn, Clifford L.....(M) Unknown
Kimbrough, Robert C., Jr.....(M) Ann Arbor
Kleinschmidt, Earl E.....(M) Urbana, Ill.
Kleinschmidt, Gladys.....Mt. Pleasant
Klingman, Theophil.....Ann Arbor
Knoll, Leo A.....Ann Arbor
La Fever, Sidney L.....Ann Arbor
Lampe, Isadore.....Ann Arbor
Law, John L.....Ann Arbor
Levin, Manuel.....(M) Ann Arbor
Lichty, Dorman E.....Ann Arbor
List, Carl F.....Ann Arbor
Lowell, Vivion F.....(M) Ypsilanti
Lynn, Harold P.....Ypsilanti
Lyons, Richard H.....Ann Arbor
MacIntyre, Robert S.....Ann Arbor
MacKaye, Lavinia G.....Ann Arbor
Malcolm, Karl D.....Ann Arbor
Mallery, Otto T.....Ann Arbor
Marshall, Mark.....Ann Arbor
Martin, Donald W.....Ypsilanti
Maxwell, James H.....Ann Arbor
McCotter, Rollo E.....Ann Arbor
McEachern, Thomas H.....Ann Arbor
Milford, Albert F.....Ypsilanti
Miller, Harold.....(M) Saline
Miller, Norman F.....Ann Arbor
Moore, Donald F.....(M) Ypsilanti
Muehlig, George F.....Ann Arbor
Myers, Dean W.....Ann Arbor
Nesbit, Reed M.....Ann Arbor
Newton, Charles W.....Ann Arbor
Oliphant, L. W.....Ann Arbor
Palmer, Alger A.....(M) Chelsea
Parsons, Robert J.....(M) Oregon
Patterson, Ralph M.....Ann Arbor
Peet, Max M.....Ann Arbor
Plumb, Robert T.....Ann Arbor
Pollard, H. M.....Ann Arbor
Potter, Marcia.....Ypsilanti
Price, Helen F.....Ann Arbor
Prout, Gordon J.....Saline
Rague, Paul O.....(M) Manchester
Ransom, Henry K.....Ann Arbor
Raphael, Theophile.....Ann Arbor
Ratliff, Rigdon K.....Ann Arbor
Reynolds, Stephen.....(M) Ann Arbor
Riecker, H. H.....Ann Arbor
Riggs, Harold W.....Ann Arbor
Robb, David N.....Ypsilanti
Rosenbaum, Francis F.....Ann Arbor
Ross, C. Howard.....Ann Arbor
Salon, Dayton D.....(M) Ann Arbor
Sayre, George S.....Ypsilanti
Schumacker, W. E.....Ann Arbor
Seevers, Maurice H.....Ann Arbor
Seime, Reuben I.....Ypsilanti
Sheldon, John M.....Ann Arbor
Sibbald, Malcolm L.....Chelsea
Sink, Emory W.....Ann Arbor
Smalley, Marianna.....Ann Arbor
Smith, Eleanor.....Ann Arbor
Smith, Joseph G.....(M) California
Snow, Glenadine.....Ypsilanti
Solis, Jeanne C.....(E) Ann Arbor
Steffe, Ralph S.....Ann Arbor
Stoddard, F. Jackson.....(M) Ann Arbor
Struthers, James N. P.....Ann Arbor
Sturgis, Cyrus C.....Ann Arbor
Sundwall, John.....Ann Arbor
Teed, Reed W.....(M) Ann Arbor
Thieme, E. Thurston.....(M) Ann Arbor
Towsley, Harry A.....(M) Ann Arbor
Valk, William L.....(M) Ann Arbor
Waggoner, R. W.....Ann Arbor
Waldron, Alexander M.....(M) Ann Arbor
Washburne, Charles L.....Ann Arbor
Watson, Ernest H.....Ann Arbor
Wessinger, J. A.....(E) Ann Arbor
Wile, Udo J.....(M) Ann Arbor
Wilkinson, Charles F.....Ann Arbor
Williams, Howard R.....Ann Arbor
Williamson, F. B.....Ypsilanti
Wilson, Frank N.....Ann Arbor
Wilson, James Leroy.....Ann Arbor
Wisdom, Inez R.....Ann Arbor
Woods, J. J.....Ypsilanti
Worth, Melissa H.....Ypsilanti
Wright, Walter J.....Ypsilanti
Wylie, Wm. C.....Dexter
Yoder, O. R.....Ypsilanti

Wayne County

Aaron, Charles D.....(E) Detroit
Abbott, William E.....Detroit
Abrams, Harry M.....Detroit
Abramson, Max.....Detroit
Abruzzo, Anthony M.....(M) Detroit
Adams, James R.....Dearborn
Adelson, Sidney L.....(M) Detroit
Adler, Sidney.....(M) Detroit
Agnelly, Edward J.....Detroit
Agnew, George H.....Detroit
Alderman, R. F.....Detroit
Aldrich, E. Gordon.....Detroit
Allen, John V.....Lincoln Park
Alles, Russell W.....Detroit
Allison, Frank B.....Detroit
Allison, Herbert C.....Grosse Pointe Farms
Alpiner, Sam.....Van Dyke
Altman, Raphael.....Detroit

Altshuler, Abraham M. Detroit
Altshuler, Ira M. Detroit
Altshuler, Samuel S. (M) Detroit
Amberg, Emil (E) Detroit
Amolsch, Arthur L. Detroit
Amos, Thomas G. Detroit
Anderson, Bruce Detroit
Anderson, Gordon H. (M) Dearborn
Anderson, J. O. Detroit
Anderson, Walter L. (M) Detroit
Anderson, Walter T. Detroit
Andries, George H. Detroit
Andries, Joseph H. Detroit
Andries, Raymond G. Detroit
Andries, Raymond M. (M) Detroit
Angel, John J. Wayne
Ankley, J. W. Detroit
Anslow, Robert E. Detroit
Appel, Philip R. Detroit
Appelman, H. B. Detroit
Arehart, Burke W. (M) Detroit
Arent, John G. Detroit
Armstrong, Arthur G. Detroit
Arnold, William J. Detroit
Arnold, Effie Detroit
Aronstam, Noah E. Detroit
Arrington, Robyn J. Detroit
Ascher, Meyer S. (M) Detroit
Ashe, Stilson R. Detroit
Ashley, L. Byron (M) Detroit
Ashton, F. B. Highland Park
Asselin, J. L. Detroit
Asselin, Regis F. (M) Detroit
Athay, Roland M. Detroit
Atchison, Russell M. Northville
Atler, Lawrence R. Detroit
Atler, Leroy L. (M) Detroit
Aubel, M. E. Detroit
August, Harry E. (M) Detroit
Auld, Douglas V. Detroit
Axelson, A. U. Detroit

Babcock, Kenneth B. (M) Detroit
Babcock, L. K. Detroit
Babcock, Myra E. Detroit
Babcock, W. W. Detroit
Bach, Walter F. Detroit
Bachman, Morris E. Detroit
Bacon, Vinton A. Detroit
Badar, Benjamin H. (M) Detroit
Baer, George J. Detroit
Baer, Raymond B. Detroit
Baeff, Michael A. Detroit
Bagley, Harry E. (M) Dearborn
Bailey, Carl C. (M) Detroit
Bailey, Don A. Detroit
Bailey, Louis J. Detroit
Baker, Clarence Detroit
Bakst, Joseph Detroit
Balaga, F. T. Detroit
Balcerski, Matthew A. Detroit
Ballard, Charles S. Detroit
Balser, Charles W. Detroit
Baltz, James I. Detroit
Barak, Lewis R. (M) Detroit
Baranowski, A. W. Detroit
Barenholtz, Benjamin (M) Detroit
Barland, Oscar L. Detroit
Barnes, Donald J. Detroit
Barnes, Van D. Detroit
Barnett, Edwin D. Detroit
Barnett, Saul E. Detroit
Barnett, Morton, Jr. Detroit
Barone, Charles J. Highland Park
Barrett, Wyman D. Detroit
Barron, William H. Detroit
Bartemeiser, Leo H. Detroit
Barton, J. R. Detroit
Bates, Gaylord S. (M) Claremont, Calif.
Bauer, Benedict J. Detroit
Bauer, A. Robert Detroit
Bauer, Lester Eugene (M) Detroit
Baumer, Moe (M) Detroit
Baumgarten, Elden C. Detroit
Bayles, John G. Detroit
Beach, Watson Detroit
Beam, A. Duane (M) Grosse Pointe
Beaton, Colin (M) Detroit
Beattie, Robert Detroit
Beaver, Donald C. Detroit
Beck, Eva F. Eloise
Becker, Abraham (M) Detroit
Becker, Joseph W. Detroit
Becklein, C. L. Detroit
Beckwitt, M. C. (M) Detroit
Bedell, A. Detroit
Beer, Joseph F. (M) Detroit
Beeuwkes, L. E. (M) Dearborn
Begle, Howell L. Detroit
Behn, Claud W. Detroit
Beigler, Sydney K. Detroit
Beitman, Max R. (M) Detroit
Belanger, Ernest E. (M) River Rouge
Belanger, Henry Detroit
Belanger, Wm. G. (M) Detroit
Belknap, Warren F. (M) Detroit
Bell, J. Kenner Detroit
Bell, William Detroit
Bennett, Germany E. Detroit
Bennett, Harry B. Detroit
Bennett, Sanford A. (M) Detroit
Bennett, Wm. E. Detroit
Bennett, Zina B. Detroit
Benson, C. D. (M) Detroit
Benson, Davis A. (M) Detroit
Benson, Virginia Detroit
Bentley, Frederick E. Plymouth
Bentley, Neil I. Detroit
Berent, Morris S. Detroit
Beresh, Louis (M) Detroit
Berge, Clarence A. Detroit
Bergman, Murray Stewart Detroit
Bergman, Theodore I. (M) Detroit
Bergo, Howard L. (M) Detroit
Berke, Sydney S. Detroit
Berkey, Wm. E. Detroit
Berlien, Ivan C. (M) Detroit
Berman, Lawrence Detroit
Berman, Robert Detroit
Berman, Sidney (M) Detroit
Bernard, Walter G. Detroit
Bernbaum, Bernard Detroit
Bernstein, Albert E. Detroit
Bernstein, Samuel S. (M) Detroit
Berry, Joseph E. Detroit
Besancon, J. H. Detroit
Best, T. H. Edward Detroit
Bicknell, Edgar A. (M) Detroit
Bicknell, Frank B. (M) Detroit
Birch, John R. (M) Detroit
Birkelo, Carl C. Detroit
Birndorf, Leonard (M) Detroit
Bittker, I. Irving Detroit
Bittrich, Norbert M. Detroit
Black, Perry S. Detroit
Blaine, Max (M) Detroit
Blain, Alexander III Detroit
Blain, Alexander W. Detroit
Blain, James H., Jr. (M) Detroit
Blair, K. E. Detroit
Blanchet, Alred D. Detroit
Blashill, James B. (M) Detroit
Bleier, Alfred Detroit
Bleier, Joseph Detroit
Bloch, Abraham Detroit
Blodgett, Wm. E. Detroit
Blodgett, Wm. H. (M) Detroit
Bloom, Arthur R. Detroit
Bloomer, Earl Dearborn
Blumenthal, Franz L. Detroit
Boccaccio, John (M) Detroit
Boccia, James J. (M) Detroit
Boddie, Lewis F. Detroit
Boddie, Arthur W. Detroit
Boehm, John D. Detroit
Boell, Arthur F. Detroit
Bogue, Robert E. Detroit
Bogusz, Ladislaus Eloise
Bohn, Stephen (M) Detroit
Boileau, Thornton I. (M) Detroit
Boles, A. E. (M) Miami, Fla.
Bookmyer, R. H. Detroit
Bookstein, Abraham M. (M) Detroit
Botvinick, Isadore (M) Detroit
Boutrous, Thomas A. Detroit
Bovill, E. G. (M) Detroit
Bower, Franklin T. Detroit
Bowers, Leo J. Detroit
Boyd, John H. Trenton
Brachman, D. S. Detroit
Bracken, Andrew H. Dearborn
Bradley, George Detroit
Bradshaw, Wm. H. Detroit
Brady, Herbert A. River Rouge
Braitman, Louis Detroit
Braley, Wm. N. Detroit
Bramigk, Fritz W. Detroit
Brand, Benjamin Detroit
Brando, Russell G. Detroit
Brandt, Edward L. Detroit
Braun, Lionel (M) Detroit
Braverman, Morris Detroit
Brekke, Viola G. Detroit
Breitenbecher, Edw. R. Detroit
Brengle, Deane R. Detroit
Breon, Guy L. Detroit
Briegel, Walter A. Detroit
Brines, O. A. (M) Detroit
Bringard, Elmer L. (M) Detroit
Brisbois, Harold J. Plymouth
Brisson, Joseph (M) Detroit
Bromme, William (M) Detroit
Bronson, Wm. W. (M) Detroit
Brooks, A. L. Detroit
Brooks, Clark D. Detroit
Brooks, Charles W. (M) Detroit
Brooks, Nathan (M) Detroit
Brosius, Wm. L. Detroit
Broudo, Philip H. Detroit
Brough, Glen A. (M) Detroit
Brouwer, Stephen W. Detroit
Brown, A. O. Detroit
Brown, Andrew G. (M) Detroit
Brown, Carlton F. (M) Detroit
Brown, Charles H. (M) Detroit
Brown, Francis Detroit
Brown, Gordon T. Detroit
Brown, Harvey F. Detroit
Brown, Henry S. Detroit
Brown, John R. (M) Detroit
Brown, Samuel M. Detroit
Brown, Stanley H. Detroit
Brown, Thomas A. Detroit
Brownell, Paul G. (M) Highland Park
Bruehl, Richard A. Detroit
Brunk, Andrew S. Detroit
Brunk, C. F. Detroit
Brunke, Bruno B. Detroit
Brush, Brock E. Detroit
Bryce, John D. (M) Detroit
Buchanan, W. Paul Detroit
Buchner, Harold W. (M) Detroit
Buck, John D. Detroit
Budson, Daniel Detroit
Buesser, Frederick G. Detroit
Buller, H. L. Detroit
Burbidge, Earl L. Detroit
Burby, John J. Detroit
Burgess, Charles M. Detroit
Burns, Robert T. Detroit
Burnstine, Julius Y. Detroit
Burnstine, Perry P. (M) Detroit
Burr, George C. Detroit
Burr, H. Leonard Grosse Pointe
Burrows, Howard A. Dearborn
Burstein, Harry S. Detroit
Burstein, I. Marvin Detroit
Burstein, Morris M. Detroit
Burton, D. T. Detroit
Bush, Glendon J. (M) Detroit
Bush, Lowell M. Detroit
Butler, Harry J. Detroit
Butler, L. H. Detroit
Butler, Volney N. Detroit
Butterworth, Herman K. Lincoln Park
Buttrum, Edward J. Detroit
Byers, Dudley W. Detroit
Byington, Garner M. Detroit

Cadieux, Henry W. Detroit
Caldwell, J. Ewart (M) Detroit
Caldwell, George L. Detroit
Calkins, H. N. (M) Detroit
Callaghan, T. T. (M) Detroit
Cameron, A. H. Wyandotte
Campau, George H. Detroit
Campbell, Charles A. (M) Dearborn
Campbell, Duncan Detroit
Campbell, Duncan A. Detroit
Campbell, Malcolm D. Pleasant Ridge
Campbell, Mary B. Detroit
Candler, Clarence L. Detroit
Canter, Allie L. Detroit
Canter, Gayle E. Detroit
Cantor, M. O. Detroit
Capano, Oreste A. (M) Detroit
Caplan, Leslie (M) Detroit
Caputo, Joseph M. (M) Dearborn
Caraway, James E. (M) Wayne
Carbone, Louis A. Detroit
Carey, Cornelius Detroit
Carleton, Lawrence H. Detroit
Carlucci, Peter F. Detroit
Carmichael, E. K. Detroit
Carnes, Harry E. (M) Detroit
Carney, John W. (M) Detroit
Carp, Joseph (M) Detroit
Carpenter, C. H. Detroit
Carpenter, C. J. Detroit
Carpenter, Glenn B. Detroit
Carpenter, William S. (M) Detroit
Carr, J. G. Detroit
Carroll, E. H. Detroit
Carroll, Lona B. Detroit
Carlson, Harold W. Detroit
Carson, Herman J. Detroit
Carstens, Henry R. (M) Philadelphia
Carter, John M. Detroit
Carter, L. F. Detroit
Cassidy, Wm. J. Detroit
Castrop, C. W. Dearborn
Cathcart, Edward (M) Detroit
Catherwood, Albert E. Detroit
Caton, Dorothy Detroit
Caughey, Edgar H. (M) Detroit
Cavell, Roscoe W. (M) Detroit
Cetlinski, Constantine A. Hamtramck
Chabut, V. George Northville
Chall, Henry G. Detroit
Chalat, Jacob H. Detroit
Chance, J. H. Detroit
Chapman, Aaron L. Detroit

Chapman, Paul T.....Detroit
Chapnick, H. A.....(M) Detroit
Chase, Clyde H.....Detroit
Chatel, Arthur N.....Detroit
Chester, W. P.....Detroit
Chesluk, H. M.....(M) Detroit
Childs, Geo. Millard.....(M) Detroit
Chipman, W. A.....Detroit
Chittenden, George E.....Detroit
Chittick, Wm. R.....(E) Detroit
Chostner, G. C.....Detroit
Christensen, C. A.....Dearborn
Christopher, James G.....Detroit
Crouch, Laurence A.....Detroit
Church, Aloysius.....Detroit
Cioffari, Mario S.....Detroit
Ciprian, Joseph E.....Detroit
Clark, Benjamin W.....(M) Detroit
Clark, C. M.....Detroit
Clark, Donald V.....Detroit
Clark, George E.....(E) Detroit
Clark, Harold E.....Detroit
Clark, Harry G.....Detroit
Clark, Harry L.....Detroit
Clark, Ronald E.....Detroit
Clarke, Norman E.....Detroit
Cleage, Louis J.....Detroit
Clifford, Charles H.....Detroit
Clifford, John E.....Detroit
Clifford, Thomas P.....Detroit
Clippert, J. C.....Grosse Ile
Coan, Glenn L.....Wyandotte
Coates, Carl A.....Dearborn
Cobane, John H.....Detroit
Cochrane, Edgar G.....Detroit
Cohen, Hyman H.....(M) Detroit
Cohn, Daniel E.....(M) Detroit
Cohoe, Don A.....Detroit
Cole, Fred H.....Detroit
Cole, James E.....Detroit
Cole, Wyman C. C.....(M) Detroit
Coleman, Margarete W.....Detroit
Coleman, William G.....Redford
Coll, Howard R.....Detroit
Collings, M. Raymond.....Detroit
Collins, James D.....Detroit
Colvert, James R.....Detroit
Colvin, Leslie T.....Detroit
Colyer, Raymond G.....Detroit
Comstock, Lawrence.....Trenton
Condon, Stanley.....Detroit
Conley, L. C. M.....Detroit
Conn, Raymond W.....(M) Detroit
Connelly, Richard C.....Detroit
Connolly, Frank.....Detroit
Connolly, John P.....Detroit
Connolly, Paul J.....Detroit
Connors, J. J.....Detroit
Conrad, E. R.....Detroit
Constable, Canute G.....Detroit
Cooksey, Warren B.....Detroit
Cook, James C.....(M) Dearborn
Coolidge, Maria Belle..Grosse Pointe Park
Cooper, B. J.....Detroit
Cooper, E. L.....Detroit
Cooper, James B.....Detroit
Cooper, Ralph R.....(M) Detroit
Corbeille, Catherine.....Detroit
Coseglia, Robert P.....Detroit
Cosgrove, Wm. J.....(M) Detroit
Costello, Russell T.....Detroit
Cotruro, L. D.....Detroit
Cotton, S. O.....Detroit
Coucke, Henry O.....(M) Detroit
Coulter, Wm. J.....(M) Detroit
Cowan, Wilfrid.....Detroit
Cowen, Leon B.....Detroit
Cowen, Robert L.....Detroit
Coyne, Douglas R.....Detroit
Crane, Langdon T.....Detroit
Crawford, Albert S.....Detroit
Cree, Walter J.....(E) Detroit
Crews, Thomas H.....Detroit
Croll, L. J.....(M) Detroit
Cross, Harold E.....Detroit
Crossen, Henry F.....Detroit
Croushore, J. E.....(M) Detroit
Cruikshank, Alexander.....Detroit
Culp, Ormond.....(M) Detroit
Curhan, Joseph H.....Detroit
Curry, F. S.....Detroit
Curtis, Frank E.....Detroit
Cushing, Russell G.....Detroit
Cushman, H. P.....Detroit
Cusick, Paul L.....(M) Detroit

Dale, Esther H.....Detroit
Dale, Mark.....(M) Detroit
Dana, Harold M.....(M) Detroit
Danforth, J. C.....Detroit
Danforth, Mortimer E.....Detroit
Daniels, L. E.....Detroit
Darling, Milton A.....Detroit
Darpin, Peter H.....Detroit
Dart, Edward E.....Detroit
Davidow, David M.....Detroit
Davidson, Harry O.....(M) Detroit
Davies, Thomas S.....Grosse Pointe
Davies, Windsor S.....(M) Detroit
Davis, Egbert F.....Wyandotte
Davis, George H.....(M) Detroit
Davis, Lindon L.....(M) Detroit
Davis, William H.....(M) Detroit
Dawson, F. E.....Detroit
Dawson, Ralph.....Detroit
Dawson, W. A.....Inkster
Day, J. Claude.....(M) Detroit
Deering, Robert J.....(M) Detroit
Defever, Cyril R.....(M) Detroit
Defnet, William A.....Detroit
DeJongh, Edwin.....Detroit
Delbert, Stewart G.....(M) Croswell
Demaray, John F.....Detroit
Dempster, James H.....Detroit
DeNike, A. James.....Detroit
Denis, George M.....Detroit
DePonio, Sylvester A.....Detroit
Derby, Arthur P.....Detroit
Deresz, Alphonse.....(M) Detroit
Derleth, Paul E.....(M) Detroit
DeSpelder, Ray E.....Detroit
DeTomasi, Rome Q.....Detroit
Dibble, Harry F.....Detroit
Dickman, Harry M.....(M) Detroit
Dickson, B. R.....Detroit
Dickson, Elias L.....Detroit
Diebel, Nelson W.....Detroit
Dietzel, H. O.....Detroit
Dill, Hugh L.....Detroit
DiLoreto, P. C.....(M) Detroit
Dittmer, Edwin.....Detroit
Dixon, Fred W.....(M) Dearborn
Dixon, Ray S.....Detroit
Dodds, John C.....Detroit
Dodenhoff, C. F.....Detroit
Dodrill, F. D.....Detroit
Doerr, Louis E.....(M) Detroit
Dolega, Stanley F.....(M) Detroit
Dolman, E. Nesbitt.....Detroit
Domzalski, C. A.....Detroit
Donald, Douglas.....(M) Detroit
Donovan, Daniel R., Jr.....Detroit
Dorsey, John M.....Detroit
Doty, Chester A.....Detroit
Doub, Howard P.....Detroit
Douglas, Bruce H.....Detroit
Douglas, Clair L.....(M) Detroit
Dovitz, Benjamin W.....Detroit
Dow, Roy E.....Detroit
Dowdle, Edward.....Detroit
Dowling, Harvey E.....(M) Detroit
Downer, Ira G.....Detroit
Doyle, George H.....Detroit
Drake, Ellet H.....(M) Detroit
Drake, James J.....Detroit
Draves, Edward F.....Detroit
Drews, Robert S.....Detroit
Drinkhaus, H. I.....Detroit
Droock, Victor.....Detroit
Drummond, Donald L.....Detroit
Dubin, Joseph J.....Detroit
Dubnove, Aaron.....Detroit
DuBois, Paul W.....Detroit
Dubpernell, Karl.....Detroit
Dubpernell, Martin S.....Detroit
Dundas, Edw. M.....Detroit
Dunlap, Henry A.....Detroit
Dunlap, Samson F.....Detroit
Dunn, Cornelius E.....Detroit
Dutchess, Charles E.....New York City
Dwaihy, Paul.....Detroit
Dwyer, Francis.....(M) Detroit
Dziuba, John F.....Detroit

Eades, Charles C.....(M) Detroit
Eadie, Gordon A.....Detroit
Eakins, Frederick J.....Dearborn
Eaton, Crosby D.....Detroit
Edgar, Russell G.....Detroit
Eder, Joseph R.....(M) Detroit
Eder, Samuel J.....Detroit
Edgar, Irving I.....Detroit
Edmonds, W. N.....Detroit
Edwards, Gilbert L.....Detroit
Edwards, J. W.....Detroit
Eisman, Clarence H.....Detroit
Eldredge, Edward F.....(M) Detroit
Elman, Meyer J.....(M) Detroit
Elliott, Wm. G.....Detroit
Elvidge, Robert J.....Detroit
Engel, Earl H.....(M) Wyandotte
Eno, Laurel S.....(M) Detroit
Ensign, Dwight C.....Detroit
Ensing, Osborn.....Detroit
Epstein, S. G.....Detroit
Erickson, Eldon W.....Detroit
Erickson, Milton H.....Eloise
Erkfitz, Arthur W.....Detroit
Eschbach, Joseph W.....(M) Dearborn
Estabrook, Bert U.....Detroit
Ettinger, Clayton J.....Detroit
Evans, Joseph M.....Detroit
Evans, Leland S.....Redford
Evans, Wm. A., Jr.....(M) Detroit
Ewing, C. H.....(M) Grosse Pointe

Fagin, Irving D.....(M) Detroit
Fair, Baxter B.....Detroit
Falk, I. E.....Detroit
Fallis, Lawrence S.....Detroit
Fandrich, Theodore.....Detroit
Farbman, Aaron A.....Detroit
Fauman, David H.....Detroit
Faunce, Sherman P.....Detroit
Felcyn, W. George.....Detroit
Feld, David.....Detroit
Feldkamp, Lee E.....(M) Detroit
Feldman, N. L.....(M) Detroit
Feldstein, Martin Z.....(M) Detroit
Fellers, Ray L.....Detroit
Fendrich, Theo. S.....(M) Detroit
Fenech, Harold B.....(M) Detroit
Fenner, Wm. A.....Detroit
Fenton, E. H.....Detroit
Fenton, Meryl M.....(M) Detroit
Fenton, Russell F.....Detroit
Ferguson, Franklin F.....(M) Detroit
Ferrera, Louis V.....(M) Detroit
Ferrara, Virginia M.....Detroit
Fettig, Carl A.....Grosse Pointe Park
Field, G. S.....(E) Grosse Pointe
Fine, Edward.....Detroit
Finkelstein, M. B.....Eloise
Fischer, Frederick J.....(M) Detroit
Fisher, Geo. S.....(M) Detroit
Fisher, O. O.....Detroit
Fisher, R. L.....Detroit
Fitzgerald, James M.....(M) Detroit
Fitzporter, A. L.....(M) Dearborn
Flaherty, H. J.....Detroit
Flaherty, N. W.....(M) Detroit
Flaherty, S. A.....Detroit
Fleming, L. N.....Detroit
Flora, Wm. R.....(M) Detroit
Flower, J. A.....Detroit
Fogt, Herbert E.....Detroit
Fogt, Robert G.....Detroit
Foley, Hugh S.....Dearborn
Foley, Joseph M.....Detroit
Font, Anthony J.....Detroit
Foote, James A.....Lincoln Park
Ford, F. A.....Detroit
Ford, George A.....Detroit
Ford, Sylvester.....(M) Detroit
Ford, Walter D.....Detroit
Fordell, F. S.....Detroit
Forrester, Alex V.....Detroit
Forsythe, John R.....(M) Detroit
Foster, E. Bruce.....(M) Detroit
Foster, Daniel P.....Detroit
Foster, Linus J.....Detroit
Foster, Owen C.....Detroit
Foster, Wm. L.....Detroit
Foster, W. M.....Detroit
Fowler, Melvin E.....Detroit
Fox, Morris Edward.....(M) Dearborn
Fraiberg, Paul L.....Detroit
Franjac, M. J.....Dearborn
Franklin, James.....Detroit
Franklin, John.....Detroit
Franzen, Nils A.....Detroit
Fraser, Eldred E.....Detroit
Fraser, Harvey E...(M) Ft. Custer, Mich.
Frazer, Mary M.....Detroit
Free, Harry W.....(M) Detroit
Freedman, John.....(M) Detroit
Freedman, Milton.....Detroit
Freeman, D. K.....Detroit
Freeman, Mabel.....Detroit
Freeman, Michael.....Detroit
Freeman, Thelma.....Detroit
Freeman, Wilmer.....Detroit
Freese, John A.....Detroit
Fremont, Joseph C.....(M) Detroit
Freund, Hugo A.....Detroit
Fried, Bernard H.....(M) Detroit
Friedlaender, Alex S.....Detroit
Friedman, David.....Detroit
Friedman, I. H.....Detroit
Frothingham, Geo. E.....(E) Detroit
Fruend, Henrietta.....Detroit
Fuerbringer, Ralph O.....Detroit
Fullenwider, Allan C.....Detroit
Fuller, Hugh M.....(M) Detroit
Fulgenzi, Andrew A.....(M) Detroit

Gaba, Howard.....(M) Detroit
Gabe, Sigmund.....(M) Detroit
Gaberman, David B.....Detroit
Gaffney, J. Mitchell.....Detroit
Galantowicz, H. C.....Detroit
Galdonyi, Laslo L.....Detroit

Galdonyi, Nicholas.....Detroit
Galerneau, D. B.....Centerline
Galvin, Paul P.....Detroit
Gamble, Parker B.....Detroit
Gannan, Arthur M.....Detroit
Ganschow, John H.....Detroit
Gariepy, L. J.....Detroit
Gardner, Lawrence.....Detroit
Garner, Howard B.....(E) Detroit
Gaston, Herbert B.....(M) Detroit
Gates, Nathaniel H.....Detroit
Gaynor, Alex.....Detroit
Gehring, Harold W.....Detroit
Gehrke, August E.....Detroit
Geib, Ledru O.....Detroit
Geib, Wayne A.....(M) Denver, Colo.
Geiter, Clyde W.....Detroit
Geitz, Wm. A.....Detroit
Gelbach, Philip D.....Detroit
Gellert, I. S.....Detroit
Gemeroy, J. C.....Detroit
Gerondale, Edmond J.....Detroit
Gibson, James C.....(E) Detroit
Giese, Fred W.....(M) Detroit
Gigante, Nicola.....Detroit
Gignac, Arthur L.....Detroit
Gilbert, Harold R.....Wyandotte
Gilbert, Roy S.....Detroit
Gillespie, Stephen M.....(M) Dearborn
Gillman, R. W.....(E) Detroit
Gingold, Samuel M.....(M) Detroit
Gingrich, Wayne A.....(M) River Rouge
Ginsberg, Harold I.....(M) Detroit
Gitlin, Charles.....(M) Detroit
Gitlin, Julius R.....Detroit
Gittins, Perry C.....Detroit
Glasgow, Gordon K.....Detroit
Glassman, Samuel.....Detroit
Glazer, Walter S.....Detroit
Gleason, John E.....Detroit
Glees, J. L.....Grosse Pointe Farms
Glement, Raymond B.....Detroit
Glowacki, B. F.....Detroit
Gmeiner, Clarence C.....Detroit
Goerke, Elmer A.....Romulus
Goetz, Angus G.....(M) Detroit
Goins, Wm. F.....Detroit
Goldberg, Arthur.....Detroit
Goldberg, Harry H.....Detroit
Goldberg, Nathan.....Detroit
Goldin, M. I.....(M) Detroit
Goldman, Perry.....(M) Detroit
Goldsmith, Joseph D.....Detroit
Goldstone, R. R.....Detroit
Gonne, Wm. S.....Detroit
Good, Wm. H.....(M) Detroit
Goodrich, B. E.....(M) Detroit
Gordon, John W.....(R) Detroit
Gordon, Wm. H.....(M) Detroit
Gorelick, Martin J.....(M) Dearborn
Gorning, Raymond P.....Detroit
Goss, Samuel B.....(M) Detroit
Gottschalk, Fred W.....Detroit
Gould, S. E.....Eloise
Gourley, E. V.....(M) Detroit
Goux, R. S.....Detroit
Grace, J. M.....Eloise
Graff, J. M.....Detroit
Grain, Gerald O.....Detroit
Grajewski, Leo E.....Detroit
Gramley, Wm.....Detroit
Granger, Francis L.....Pontiac
Grant, Heman E.....Detroit
Gratton, Henri L.....Detroit
Gravelle, Lawrence J.....Detroit
Green, Ellis R.....Detroit
Green, Lewis.....Detroit
Green, Louis M.....(M) Detroit
Green, Nelson W.....Detroit
Green, Simpson W.....Detroit
Green, Sydney H.....(M) Detroit
Greenberg, Julius J.....(M) Detroit
Greenberg, Morris Z.....(M) Detroit
Greene, John B.....Detroit
Greenidge, Robert.....Detroit
Greenlee, Wm. T.....Detroit
Greiner, Bert A.....Detroit
Grekin, Samuel L.....Detroit
Griffith, Arthur J.....Detroit
Grillo, S. Phillip.....Belleville
Grimaldi, G. J.....(M) Detroit
Grinstein, Alexander.....Detroit
Grob, Otto.....Detroit
Grossman, Sol.....(M) Detroit
Gruber, T. K.....Detroit
Gudger, James R.....(M) Detroit
Guimaraes, A. S.....Dearborn
Gurdjian, E. S.....Detroit
Gurman, Ben G.....(M) Detroit
Gutow, Benjamin R.....(M) Detroit

Haefele, Leslie P.....Garden City
Hale, Arthur S.....Detroit
Hall, E. Walter.....Detroit
Hall, James A. J.....Detroit
Hall, Ralph E.....Detroit
Hall, Robert J.....Detroit
Haluska, Joseph A.....Detroit
H'Amada, Norman K.....Detroit
Hamburger, A. C.....(M) Detroit
Hamil, Brenton M.....Dearborn
Hamilton, Norman C.....Detroit
Hamilton, Wm.....Detroit
Hamilton, Wm. F.....Detroit
Hammer, Edwin J.....Detroit
Hammer, Howard J.....(M) Detroit
Hammond, A. E.....Detroit
Hammond, James L.....Inkster
Hanna, E. Howard.....Detroit
Hansen, Frederick E.....Detroit
Hanser, Joshua.....Detroit
Hanson, Frederick N.....(M) Eloise
Hanson, Joseph.....Detroit
Harelik, E. W.....Detroit
Hardstaff, R. John.....Detroit
Hardy, George C.....Detroit
Harley, Garth H.....(M) Detroit
Harley, Louis M.....Detroit
Harm, W. B.....Detroit
Harper, Jesse T.....(M) Detroit
Harrell, Voss.....Detroit
Harris, Harold H.....(M) Detroit
Harris, Ivor D.....Detroit
Harris, Landy E.....Detroit
Harrison, Hugh.....Detroit
Harrison, Wesley.....Detroit
Hart, Charles E.....(M) Detroit
Hart, J. Clarence.....(M) Detroit
Hartman, Frank W.....Detroit
Hartmann, W. B.....Detroit
Hartzell, John B.....(M) Detroit
Hasley, Clyde K.....Detroit
Hasley, Daniel E.....Detroit
Hassig, Walter W.....(M) Detroit
Hastings, Orville J.....Detroit
Hause, Glen E.....(M) Detroit
Hauser, I. Jerome.....(M) Detroit
Hauser, John E.....Detroit
Havers, Howard.....Detroit
Hawkins, James W.....Detroit
Hayes, Joseph D.....Detroit
Heath, Leonard P.....(M) Detroit
Heath, Parker.....Detroit
Heavner, L. E.....(M) Detroit
Hecht, M.....Detroit
Hedgeman, E. C.....Detroit
Hedges, Frank W.....Detroit
Hedrick, Donald W.....Detroit
Heenan, T. H.....Detroit
Heideman, Louis.....(M) Detroit
Heldt, Thomas J.....Detroit
Hendelman, Manuel H.....Detroit
Henderson, A. B.....(M) Detroit
Henderson, Harold.....Detroit
Henderson, J. L.....Detroit
Henderson, Leslie T.....Detroit
Henderson, Wm. E.....Detroit
Henderson, Wm. W..(M) Falconer, N. Y.
Hendry, H. W.....Detroit
Henig, Fred.....(M) Detroit
Henrich, L. E.....Detroit
Herkimer, Dan R.....(M) Lincoln Park
Herrold, Rose E.....Detroit
Herschelmann, Roy F.....(M) Detroit
Hershey, Lynn N.....Detroit
Hewitt, Leland V.....Detroit
Hewitt, Robert S.....(M) Dearborn
Heyner, Stanley A.....Detroit
Hickey, Joseph.....Detroit
Hiebert, J. M.....Detroit
Higbee, Arthur L.....Detroit
Hileman, Lee.....Ecorse
Hillenbrand, Alfred E.....(M) Detroit
Hiller, Glenn I.....Detroit
Hilton, Wm. E.....Detroit
Hinko, Edward N.....Eloise
Hipp, Wm.....Detroit
Hirschman, L. J.....Detroit
Hochman, Morton M.....Detroit
Hirschfield, Alexander H.....(M) Detroit
Hodges, Roy W.....Detroit
Hodgkinson, C. P.....(M) Detroit
Hodoski, Frank J.....Detroit
Hoenig, Andrew L.....Mancelona
Hoffman, E. S.....Detroit
Hoffman, Henry A.....(M) Detroit
Hoffman, R. F.....Detroit
Hoffmann, Martin H.....Detroit
Holcomb, August A.....Northville
Holcomb, Clayton E.....Detroit
Hollander, A. J.....Detroit
Hollis, Henry B.....Detroit
Holman, Herbert H.....(M) Detroit
Holmes, Alfred W.....Detroit
Holt, Henry T.....Detroit
Honhart, Fred L.....Detroit
Honor, Wm. H.....Wyandotte
Hooker, Donald H.....(M) Detroit
Hookey, J. A.....(M) Detroit
Hooper, Norman L.....Detroit
Hoopes, Benjamin F.....(M) Detroit
Hoops, George B.....Detroit
Hopkins, J. E.....Detroit
Horan, Thomas.....(M) Detroit
Horkins, Harold A.....Detroit
Horny, Hugo.....(M) Detroit
Horton, Reece H.....Detroit
Horvath, Louis O.....Detroit
Horwitz, John B.....(M) Detroit
Hotchkiss, Loris M.....Farmington
Howard, Austin Z.....Detroit
Howard, Philip J.....Detroit
Howell, Bert F.....Detroit
Howes, Homer A.....(M) Detroit
Howlett, Howard T.....Detroit
Hromadko, Louis.....Detroit
Hubbard, John P.....Detroit
Hubbard, Ralph G.....Detroit
Hudson, A. Willis.....Detroit
Hudson, J. Stewart.....Grosse Pointe
Hudson, Wm. A.....Detroit
Huegli, Wilfrid A.....(M) Detroit
Huff, Reginald G.....Wayne
Hughes, Albertie A.....Detroit
Hull, L. W.....Detroit
Hunt, T. H.....Detroit
Hunt, Verne G.....Detroit
Hunter, Basil H.....Detroit
Hunter, C. M.....Detroit
Hunter, Elmer N.....Detroit
Husband, Charles W.....Detroit
Hussey, Raymond.....Detroit
Hyatt, Jarvis M.....(M) Detroit

Iacobell, Peter H.....(M) Detroit
Ignatius, A. A.....Detroit
Igna, Eli J.....Detroit
Insley, Stanley W.....Detroit
Irvin, Earle A.....Detroit
Irwin, W. A.....Detroit
Israel, Barney B.....(M) Detroit
Israel, J. G.....Detroit
Ivkovich, Peter.....(M) Lincoln Park

Jackson, George F.....Detroit
Jacobson, Samuel D.....Detroit
Jacoby, Myron D.....Detroit
Jaeger, Grove A.....Detroit
Jaeger, Julius P.....Detroit
Jaekel, C. N.....Detroit
Jaffar, Donald J.....Detroit
Jaffe, J. L.....Detroit
Jaffe, Jacob.....Detroit
Jaffe, Louis.....(M) Detroit
Jahsman, Wm. E.....Detroit
James, Richard G.....Detroit
Jamieson, Thomas J.....Lincoln Park
Janicki, Natalia J.....Eloise
Jarre, Hans A.....Detroit
Jarzembowski, F. B.....Detroit
Jarzynka, Frank J.....Detroit
Jasion, Lawrence J.....(M) Detroit
Jend, Wm. J.....Detroit
Jenkins, E. A.....(M) Detroit
Jenne, Byron H.....Detroit
Jennings, Robert M.....(M) Detroit
Jentgen, Charles J.....Detroit
Jentgen, L. G.....Detroit
Jewell, F. C.....Detroit
Jocz, M. W.....Grosse Pointe Park
Jodar, E. O.....Detroit
John, Hubert R.....Detroit
Johnson, Homer L.....Detroit
Johnson, Ralph A.....Detroit
Johnson, Vernon P.....Detroit
Johnson, Vincent C.....Detroit
Johnson, W. H. M.....Detroit
Johnston, Charles G.....Detroit
Johnston, Everett V.....Detroit
Johnston, J. A.....Detroit
Johnston, John L.....Detroit
Johnston, Wm. E.....Detroit
Johnstone, Benjamin I.....Detroit
Joinville, E. V.....Detroit
Jones, Arthur J.....Detroit
Jones, Adrian R.....Detroit
Jones, Edna M.....Northville
Jones, H. G.....(M) Detroit
Jones, L. Faunt.....Detroit
Jones, Roy D.....Detroit
Joyce, Stanley J.....(M) Detroit
Juliar, Benjamin.....(M) Detroit
Jurow, Harry N.....Detroit

Kalayjian, Bernard S.....Detroit
Kallet, Herbert I.....Detroit
Kallman, David.....Detroit
Kallman, Leo.....Detroit
Kallman, R. Robert.....(M) Detroit
Kamin, Louis E.....(M) Detroit
Kaminski, Ladilasus R.....Detroit
Kaminski, Zeno L.....Detroit
Kamperman, George A.....Detroit

Kanter, Herman.....(M) Detroit
Kapetansky, A. J.....Detroit
Kapetansky, Nathan J.....Detroit
Kaplita, Walter A.....(M) Hamtramck
Karr, Herbert S.....Detroit
Kasabach, Harry Y.....(M) Detroit
Kasaback, V. Y.....Detroit
Kasper, Joseph A.....Detroit
Kass, Arnold.....(M) Detroit
Kass, J. B.....Detroit
Kates, Simon C.....Detroit
Katzman, I. S.....Detroit
Kaump, Donald H.....Detroit
Kauppinen, J. A.....Detroit
Kay, Edward W.....Hamtramck
Kay, Harry H.....(M) Detroit
Kazdan, Louis.....(M) Detroit
Kazdan, Morris A.....(M) Detroit
Keane, Wm. E.....Detroit
Kearns, Hubert J.....Detroit
Keating, Thomas F.....Detroit
Keene, Clifford H.....(M) Detroit
Kehoe, Henry J.....East Detroit
Kemler, Walter J.....Ecorse
Kemp, Hardy A.....(M) Detroit
Kennary, James M.....Detroit
Kennedy, Charles S.....Detroit
Kennedy, Lester F.....Detroit
Kennedy, Robert B.....Detroit
Kennedy, Wm. Y.....Detroit
Kern, W. H.....Garden City
Kernkamp, Ralph.....Detroit
Kernick, M. O.....(M) Detroit
Kersten, Armand G.....Detroit
Kersten, Werner.....Detroit
Kerzman, Joseph H.....Detroit
Keshishian, Sarkis K.....Detroit
Keyes, Eugene C.....Dearborn
Keyes, John W.....(M) Detroit
Kibzey, Ambrose T.....Detroit
Kidner, Frederick C.....Detroit
Kimball, David C.....(M) Detroit
Kimberlin, Kenneth K.....(M) Detroit
King, Edward D.....Detroit
King, Melbourne J.....(M) Detroit
Kingswood, Roy C.....Detroit
Kirchner, Augustus.....Detroit
Kirker, J. G.....Detroit
Kirschbaum, Harry M.....(M) Detroit
Klebba, Paul.....Detroit
Klein, Wm.....Detroit
Kleinman, S.....Detroit
Kliger, David.....Detroit
Kline, Lewis L.....Detroit
Kline, Starr L.....Detroit
Klosowski, Joseph.....Detroit
Klote, M. D.....Detroit
Knaggs, Charles W.....Grosse Pointe
Knaggs, Earl J.....(M) Wyandotte
Knapp, Byron S.....(M) River Rouge
Knapp, Floyd.....Detroit
Knobloch, Edmund J.....Detroit
Knoch, Hubert S.....(M) Detroit
Knox, Ross M.....Ecorse
Koebel, R. H.....Detroit
Koessler, George L.....Detroit
Kohn, A. Max.....(M) Detroit
Kohn, M. E.....Detroit
Kokowicz, Raymond.....(M) Detroit
Kopel, Joseph O.....Detroit
Korby, George J.....Detroit
Kosanovic, Frederick.....(M) Detroit
Koss, Frank R.....Detroit
Kossayda, Adam W.....(M) Detroit
Koster, Koert.....Detroit
Kovach, Emery.....(M) Detroit
Kovan, D. D.....(M) Detroit
Koven, Abraham.....Detroit
Kozlow, Louise E.....Detroit
Kozlinski, Anthony E.....(M) Detroit
Kraft, Raymond B.....Detroit
Kraft, Ruth M.....Detroit
Krass, Edward W.....(M) Detroit
Kraus, John J.....Detroit
Krebs, Wm. T.....Detroit
Kreinbring, George E.....Detroit
Kretzschmar, Clarence A.....Detroit
Krieg, Earl G.....Detroit
Krieger, Harley I.....Detroit
Kritchman, M. J.....Detroit
Kroha, Lawrence.....Detroit
Krohn, Albert H.....Detroit
Krynicki, Francis X.....Detroit
Kubanek, Joseph L.....Eloise
Kucmierz, Francis S.....(M) Detroit
Kuhn, Albert A.....(M) Detroit
Kuhn, Richard F.....(M) Detroit
Kulaski, Chester H.....Detroit
Kullman, Harold J.....(M) Detroit
Kurcz, J. A.....(M) Detroit
Kurtz, I. J.....Detroit
Kwasiborski, S. A.....Wyandotte

Laberge, James M.....(M) Wyandotte
LaCore, Ivan.....(M) Pontiac
LaFerte, Alfred D.....Detroit
Lakoff, Charles.....Detroit
Lam, Conrad R.....Detroit
Lamberson, Frank A.....Detroit
LaMarche, N. O.....Detroit
Lammy, James V.....Detroit
Lampman, H. H.....Detroit
Landers, M. B., Sr.....Detroit
Landers, M. B., Jr.....Detroit
Lang, Ernest F.....Detroit
Lang, Leonard W.....Detroit
Lange, Anthony H.....Detroit
Lange, Wm. A.....(M) Detroit
Laning, George M.....Detroit
Lansky, Mandell.....(M) Detroit
Lapham, Fred E.....(M) Detroit
Lasley, James W.....Detroit
Lassaline, S. J.....Detroit
Lathrop, Philip L.....Detroit
Latteier, K. K.....Detroit
Laub, Stanley V.....(M) Detroit
Lauppe, Edward H.....Detroit
Lauppe, F. A.....(M) Detroit
Law, John H.....Detroit
Lawrence, Wm. C.....Detroit
Lazar, Morton R.....(M) Detroit
Leach, David.....(M) Detroit
Leacock, Robert C.....Detroit
Leader, L. E.....Detroit
Leaver, L. Ross.....Detroit
Leckie, George C.....Detroit
Ledwidge, Patrick L.....Detroit
Lee, Harry E.....Detroit
LeGallee, George M.....(M) Detroit
Lehman, Wm. L.....(M) Detroit
Leibinger, Henry R.....Detroit
Leipsitz, Louis S.....(M) Detroit
Leiser, Rudolf.....Eloise
Leithauser, D. J.....Detroit
Leland, Hyde S.....Detroit
Leland, Sol.....(M) Detroit
Lemley, Clark.....Detroit
Lemmon, Charles E.....(M) Detroit
Lemmon, Clarence W.....River Rouge
Lentine, James J.....(M) Detroit
Lenz, Willard R.....Detroit
Lepard, C. W.....Detroit
Lepley, Fred O.....Detroit
Lerman, S. E.....Detroit
Lescoheir, Alex W.....Grosse Pointe
L'Esperance, Simon P.....Detroit
Leszynski, J. S.....Detroit
Leucutia, Traian.....Detroit
Levant, Arthur B.....(M) Detroit
Levin, David M.....(M) Detroit
Levin, Michael M.....(M) Detroit
Levin, Samuel J.....Detroit
Levine, Edward E.....(M) Detroit
Levine, Sidney S.....(M) Detroit
Levitt, Edward J.....Detroit
Levitt, Nathan.....Detroit
Levy, Marvin B.....Detroit
Lewin, Harry.....Detroit
Lewis, Charles T.....Detroit
Lewis, J. Hugh.....(M) Wyandotte
Lewis, Wilfred J.....(M) Detroit
Libbrecht, Robert V.....Dearborn
Lichter, M. L.....(M) Melvindale
Lichtwardt, Hartman A.....East Detroit
Lieberman, B. L.....Detroit
Liddicoat, A. G.....Detroit
Lightbody, James J.....Detroit
Lignell, Rudolph.....Detroit
Lilly, Charles J.....Detroit
Linton, James R.....Eloise
Lipinski, Stanley L.....Detroit
Lipkin, Ezra.....Detroit
Lippold, Paul H.....Detroit
Lipton, Raymond.....(M) Detroit
Lipschutz, Louis S.....(M) Eloise
Littlejohn, David.....Eloise
Livingston, George D.....(M) Detroit
Livingston, George M.....(R) Detroit
Lockwood, Bruce C.....Detroit
Lofstrom, James E.....(M) Detroit
Long, Earle C.....Detroit
Long, John J.....Detroit
Longyear, Harold W.....(M) Detroit
Lookanoff, Victor A.....Detroit
Loranger, C. B.....Detroit
Lorber, Joseph H.....(M) Detroit
Lorentzen, Edwin H.....Detroit
Lovas, W. S.....(M) Detroit
Lovell, B. K.....(M) Detroit
Lovering, Wm. J.....Detroit
Lowe, Adolf.....(M) Detroit
Lowrie, G. B.....Detroit
Lowrie, Wm. L., Jr.....Detroit
Lowry, George L.....Detroit
Luce, Henry A.....Detroit
Lukas, John R.....(M) Detroit
Lum, Thomas K.....(M) Detroit
Lutz, Earl F.....Detroit
Lynn, David H.....Detroit
Lynn, Harvey D.....Detroit
Lyons, L. Mason.....Detroit
Lyons, Wm. H.....Detroit
Lytle, Robert P.....(M) Detroit

Mabee, Frank P.....Detroit
Mabley, J. Donald.....(M) Detroit
MacArthur, Robert A.....Detroit
MacCracken, Frances L.....Detroit
MacDougall, Orrin P.....Detroit
MacFarlane, Howard W.....Detroit
MacGregor, W. W.....Detroit
Mack, Harold C.....(M) Detroit
MacKenzie, Earle D.....Detroit
MacKenzie, Edward P.....(M) Detroit
MacKenzie, Frank M.....Detroit
Mackenzie, John W.....Grosse Pointe
Mackersie, W. G.....Detroit
MacMillan, Francis B.....Detroit
MacMullen, Frank B.....Detroit
MacQueen, Malcolm D.....Detroit
MacPherson, K. C.....Detroit
Maczewski, John E.....Detroit
Madsen, Martha.....Detroit
Magnell, Ralph C.....Detroit
Maguire, Clarence E.....Detroit
Mahoney, Hugh M.....Detroit
Maibauer, F. P.....(M) Wyandotte
Mair, Harold U.....(M) Detroit
Maire, E. D.....(M) Grosse Pointe
Malachowski, B. T.....Detroit
Malik, Edward A.....Detroit
Malik, Nur M.....Detroit
Malina, Stephen.....Detroit
Maloney, John A.....Detroit
Mancuso, Vincent.....Detroit
Mandiberg, Jack N.....(M) Detroit
Manning, Morey H.....Detroit
Maples, Douglas E.....(M) Detroit
Marcotte, Oliver.....Detroit
Marcus, Daniel B.....Detroit
Marinus, Carleton J.....Detroit
Marion, Donald F.....(M) Detroit
Mark, Jerome.....(M) Detroit
Markel, Joseph M.....(M) Detroit
Markoe, Rupert C. L.....Detroit
Marks, Ben.....(M) Detroit
Marks, Morris.....Detroit
Marsden, Thomas B.....Detroit
Marsh, Alton R.....Detroit
Marshall, James R.....Detroit
Martin, Edward G.....Detroit
Martin, Elbert A.....Detroit
Martin, I. Herbert.....Detroit
Martin, J. B., Jr.....Detroit
Martin, L. R.....Detroit
Martin, R. M.....Detroit
Martinez, P. O.....Detroit
Martmer, Edgar.....(M) Grosse Pointe
Marwil, T. B.....(M) Detroit
Mason, Percy W.....Detroit
Massengile, Cleave.....Detroit
Mateer, John G.....Detroit
Mathes, Charles J.....Detroit
Maun, Mark E.....Detroit
Maxwell, J. Harvey.....Detroit
May, Earl W.....Highland Park
May, Frederick T., Jr.....(M) Detroit
Mayer, E. V.....Detroit
Mayer, Willard D.....Detroit
Mayne, C. H.....(M) Detroit
McAfee, F. W.....Detroit
McAlonan, Wm. T.....Detroit
McAlpine, Archibald D.....Detroit
McAlpine, Gordon S.....Detroit
McBroom, Russell E.....Detroit
McClellan, Robert J.....Detroit
McClendon, James J.....Detroit
McClintock, J. J.....Detroit
McClure, Robert W.....(M) Detroit
McClure, Roy D.....Detroit
McClure, Wm. R.....Detroit
McColl, Charles W.....(M) Wyandotte
McColl, Clarke M.....Detroit
McColl, Kenneth M.....Detroit
McCollum, E. B.....(M) Detroit
McCord, Carey P.....Detroit
McCormick, Colin C.....Dearborn
McCormick, Crawford W.....Detroit
McCormick, Frank.....Detroit
McCullough, Lester E.....Detroit
McDonald, Angus L.....Detroit
McDonald, George O.....Detroit
McDonald, Grant.....Detroit
McDonald, Peter W.....Wyandotte
McDougall, Bernard W.....Detroit
McEvitt, Wm. G.....Detroit
McGarvah, A. W.....Detroit
McGarvah, Joseph A.....Detroit
McGhee, Richard S.....Detroit
McGillicuddy, Walter E.....Detroit
McGinnis, Daniel H.....Detroit
McGlaughlin, Nicholas D.(M) Wyandotte

McGough, Joseph M.....(M) Detroit
McGraw, Arthur B.....
(M) Grosse Pointe Farms
McGuire, Ivan A.....(M) Detroit
McGuire, M. Ruth.....Detroit
McKean, G. Thomas.....(M) Detroit
McKean, Richard M.....(M) Detroit
McKenna, Charles J.....(M) Detroit
McKinnon, John D.....Detroit
McLane, Harriett E.....Detroit
McLean, Don W.....(M) Detroit
McLean, Harold G.....Detroit
McPherson, E. Glenn.....Dearborn
McPherson, R. J.....Detroit
McQuiggan, Mark R.....Detroit
McQuiggan, Paul.....(M) Detroit
McRae, Donald H.....Detroit
Mead, John.....Detroit
Mead, William.....Detroit
Meinecke, Helmuth A.....Detroit
Mellen, Hyman S.....Detroit
Melnik, Maxim P.....Detroit
Menagh, Frank R.....Detroit
Mendelssohn, R. J.....Detroit
Merkel, Charles C.....Grosse Pointe
Merrill, Wm. O.....Detroit
Merriman, K. S.....Detroit
Merritt, Earl G.....Detroit
Metzger, Harry C.....Detroit
Meyer, Ruben.....Detroit
Meyers, M. P.....(M) Detroit
Meyers, Solomon G.....(M) Detroit
Miley, H. H.....Detroit
Millard, Glenn E.....Detroit
Miller, Daniel H.....Detroit
Miller, Harry A.....(M) Detroit
Miller, Hazen L.....Detroit
Miller, Karl.....(M) Detroit
Miller, Maurice P.....Trenton
Miller, Myron H.....Detroit
Miller, T. H.....(M) Detroit
Mills, Clinton C.....(M) Detroit
Mills, Georgia V.....Detroit
Milton, Boynton A.....Inkster
Mintz, Morris J.....(M) Detroit
Mintz, Edward I.....Detroit
Miral, Solomon P.....Detroit
Mishelevich, Sophie.....Detroit
Mitchell, C. Leslie.....Detroit
Mitchell, Gertrude F.....Detroit
Mitchell, Ralston S.....Detroit
Mitchell, W. Bede.....(M) Detroit
Moehlig, Robert C.....Detroit
Moisides, V. P.....Detroit
Moll, Clarence D.....Detroit
Molner, Joseph G.....Detroit
Moloney, J. Clark.....(M) Rochester
Mond, Edward.....Detroit
Monfort, Willard.....Detroit
Montgomery, John C.....Detroit
Montante, Joseph R.....(M) Detroit
Moore, Doris Sanders.....Detroit
Moore, James A.....Detroit
Moore, Milridge B.....Detroit
Morand, Louis J.....Detroit
Morgan, Donald Nye.....(M) Detroit
Moriarty, George.....Detroit
Morin, John B.....Detroit
Moritz, H. C.....Detroit
Morley, Harold V.....(M) Detroit
Morley, James A.....Detroit
Morris, Harold L.....Detroit
Morris, Roger S.....(M) Grosse Pointe
Morrison, G. W.....Detroit
Morse, Plinn F.....Detroit
Morton, David G.....(M) Detroit
Morton, J. B.....Detroit
Mosee, W. Jones.....Detroit
Mosen, Max M.....Detroit
Moss, E. B.....Detroit
Moss, Selma S.....Detroit
Mott, Carlin P.....Detroit
Moyer, Carl A.....Eloise
Muellenhagen, Walter J.....Detroit
Munson, F. T.....Detroit
Muntyan, Andrew.....Detroit
Murphy, D. J.....(M) Detroit
Murphy, Frank J.....(M) Detroit
Murphy, John M.....(M) Detroit
Murphy, Scipio G.....Detroit
Murphy, W. M.....Detroit
Murray, George M.....Detroit
Murray, Wm. A.....Detroit
Muske, Paul H.....(M) Detroit
Myers, Dan W.....(M) Detroit
Myers, George P.....Detroit
Myers, Gordon B.....Grosse Pointe

Nagel, Oscar.....(M) Detroit
Nagle, John W.....(M) Wyandotte
Naud, Henry J.....Detroit
Nawotka, E. E.....Detroit
Naylor, A. E.....Detroit
Naylor, Arthur H.....Detroit
Neeb, Walter G.....(M) Detroit
Nelson, Darwin M.....(M) Detroit
Nelson, Harry M.....Detroit
Nelson, Victor E.....(M) Detroit
Neumann, Arthur J.....Detroit
Newbarr, Arthur A.....Detroit
Newman, Max K.....Detroit
Nielsen, Aage E.....(M) Detroit
Nichamin, Samuel J.....(M) Detroit
Nickels, Albert W.....(M) Detroit
Nickerson, I. Dean.....(M) Detroit
Nigro, Norman D.....(M) Detroit
Nill, John B.....Detroit
Nill, Wm. F.....Detroit
Nixdorf, Wallace B.....(M) Detroit
Noer, Rudolf J.(M) Grosse Pointe Farms
Nolan, Bernard E.....Detroit
Nolting, Wilfred S.....(M) Detroit
Norconk, A. A.....(M) Detroit
Norris, Edgar H.....Detroit
Northrop, Arthur K.....Detroit
Norton, A. B.....Detroit
Norton, Chas. S.....Detroit
Noth, Paul H.....Grosse Pointe Farms
Novy, R. L.....Detroit
Nowicki, Joseph A.....Detroit

O'Brien, E. J.....Detroit
O'Brien, G. M.....Detroit
O'Donnell, Charles.....Dearborn
O'Donnell, David H.....(E) Detroit
O'Donnell, Dayton H.....(M) Detroit
Ohmart, Galen B.....Detroit
O'Hora, James T.....Detroit
Ohrt, Harold F.....Detroit
Olen, Alex.....(M) Detroit
Olechowski, Leo W.....(M) Grosse Ile
Olmsted, Wm. R.....Detroit
Oman, Cyrus F.....Detroit
Oppenheim, J. M.....(M) Detroit
Organ, Fred W.....Detroit
Ormond, John K.....Detroit
Orecklin, L.....Detroit
Ornstein, Charles.....Detroit
O'Rourke, Paul V.....Detroit
O'Rourke, R. M.....Detroit
Osius, Eugene A.....(M) Detroit
Ott, Harold A.....(M) Detroit
Ottaway, John P.....(M) Detroit
Owen, Clarence I.....(M) Detroit
Owen, James A.....Detroit

Palmer, Alice.....Detroit
Palmer, Hayden.....Detroit
Palmer, R. Johnston.....Detroit
Pangburn, L. E.....Detroit
Panic, Stephen M.....Detroit
Panzner, Edward J.....Detroit
Parker, Albert R.....Wayne
Parker, Benjamin R.....(M) Detroit
Parker, Walter R.....(E) Detroit
Parr, R. W.....Detroit
Parsons, John P.....Grosse Pointe Park
Pasternacki, Norbert T.....Detroit
Paterson, Walter G.....Detroit
Patton, Henry S.....(M) Detroit
Pawlowski, Jerome.....Detroit
Paysner, Harry A.....Detroit
Peabody, Charles W.....(M) Detroit
Peacock, Lee W.....Highland Park
Pearse, Harry A.....Detroit
Peggs, George F.....(M) Detroit
Pelczar, Walter.....(M) Detroit
Penberthy, Grover C.....(M) Detroit
Pendy, John M.....(M) Detroit
Pensler, Meyer.....(M) Detroit
Pequegnot, Charles F.....Detroit
Perdue, Grace M.....Detroit
Perkin, Frank S.....(M) Detroit
Perkins, Ralph A.....New York City
Perlis, H. L.....Detroit
Perry, Alvin L.....(M) Detroit
Peterman, Earl A.....Detroit
Petix, Samuel C.....Detroit
Pevin, Pauline.....Detroit
Pfeffer, Isadore S.....(M) Detroit
Pfeiffer, Rudolph L.....Detroit
Pickard, Orlando W.....Detroit
Pierce, Frank L.....Detroit
Pierson, Max J.....Detroit
Pietraszewski, A. W.....Detroit
Pilling, M. A.....Detroit
Pinckard, Karl G.....Detroit
Pink, Rose M.....Detroit
Pinney, Lyman J.....Detroit
Pino, Ralph H.....Detroit
Piper, Ralph R.....Detroit
Plaggemeyer, H. W.....Detroit
Pliskow, Harold.....(M) Detroit
Podezwa, John W.....
(M) GrossePointe Woods
Pollack, John J.....Detroit
Pool, Walter D.....Detroit
Poole, Marshall W.....(M) Detroit
Poos, Edgar.....Detroit
Porretta, Anthony C.....Detroit
Porretta, F. S.....Detroit
Porter, Howard J.....Romulus
Posner, Irving.....Detroit
Pratt, Jean P.....Detroit
Pratt, Lawrence.....(M) Detroit
Prendergast, John J.....Detroit
Priborski, Benjamin H.....Detroit
Price, A. H.....Detroit
Price, Alvin Edwin.....(M) Detroit
Proctor, Bruce.....Detroit
Proud, Robert H.....Flat Rock
Pugliesi, Benedetto.....Detroit
Purcell, Frank H.....Detroit
Putra, A. M.....(M) Grand Rapids

Quigley, Wm.....Detroit

Rabinovitch, Bella.....Detroit
Rahm, Lambert P.....(M) Detroit
Raiford, Frank P.....Detroit
Rand, Morris.....Detroit
Rao, John O.....Detroit
Raskin, John.....Detroit
Raskin, Morris.....Detroit
Rastello, Peter B.....Detroit
Ratigan, C. S.....Dearborn
Raynor, Harold F.....Detroit
Reberdy, George J.....Detroit
Reder, Ben.....(M) Detroit
Reed, E. Hobart.....Detroit
Reed, H. Walter.....Detroit
Reed, Ivor E.....Detroit
Rees, Howard C.....Detroit
Reichling, R. J.....(M) Detroit
Reid, J. Gilbert.....(M) Detroit
Reid, Wesley G.....(M) Detroit
Reiff, Morris V.....(M) Detroit
Reinbolt, Charles A.....Detroit
Reinsh, Ernest R.....(M) Detroit
Reisman, Nathan J.....Detroit
Rekshaw, W. R.....(M) Detroit
Renaud, G. L.....(E) Detroit
Rennell, Leo P.....Detroit
Renz, Russell H.....Detroit
Reske, Alven.....(M) Dearborn
Reveno, Wm. S.....Detroit
Rexford, Walton K.....Detroit
Reye, H. A.....Detroit
Reyner, C. E.....Detroit
Reynolds, R. P.....Detroit
Rezanka, Harold J.....Detroit
Rhoades, F. P.....Detroit
Rice, Harold B.....Detroit
Rice, Meshel.....(M) Oxford
Richardson, Allan L.....Detroit
Richardson, Robert P.....Wayne
Rick, Paul J.....Detroit
Ridge, Ralph W.....Wyandotte
Rieden, James A.....Detroit
Rieckhoff, George G.....Detroit
Rieger, John B.....Detroit
Rieger, Mary H.....Detroit
Riseborough, E. C.....Detroit
Rizzo, Frank.....Grosse Pointe Park
Robb, Edw. L.....Detroit
Robb, Herbert F.....Belleville
Robb, J. Milton.....Grosse Pointe Village
Roberts, Arthur J.....Ecorse
Roberts, Stanley B.....Detroit
Robertson, Tom H.....Detroit
Robins, Samuel C.....Detroit
Robinson, Edwin L.....Detroit
Robinson, Fred L.....Dearborn
Robinson, George W.....Detroit
Robinson, Howard.....(M) Detroit
Robinson, John.....Detroit
Robinson, R. G.....Detroit
Rogers, Aaron Z.....Grosse Pointe Woods
Rogers, James D.....Wyandotte
Rogin, James R.....Detroit
Rogoff, A. S.....(M) New York
Rohde, Paul C.....Detroit
Roland, Charles F.....Detroit
Rom, Jack.....(M) Detroit
Roman, Stanley J.....(M) Detroit
Roney, Eugene H.....(M) Detroit
Root, Charles T.....(M) Detroit
Rosbolt, Oscar P.....Detroit
Rose, Bernard.....Detroit
Rosen, Robert.....Detroit
Rosenberger, Homer.....(M) Detroit
Rosenman, J. D.....Detroit
Rosenthal, Louis H.....(M) Detroit
Rosenthal, Samuel.....(M) Detroit
Rosenwach, Felix E.....(M) Detroit
Rosenzweig, Saul.....Detroit
Ross, D. G.....Grosse Pointe
Ross, Ben C.....(M) Detroit
Ross, Hyman.....(M) Dearborn
Ross, Samuel H.....(M) Dearborn
Rotarius, E. M.....Detroit
Roth, Edward T.....Detroit

Roth, Theodore I. (M) Detroit
Rothbart, H. B. Detroit
Rothman, Emil D. Detroit
Rothman, H. R. (M) Detroit
Rottenberg, Leon (M) Detroit
Rowell, Robert C. Eloise
Rubright, Leroy W. (M) Detroit
Rucker, Julian J. Detroit
Rueger, Milton J. (M) Detroit
Rueger, Ralph C. Detroit
Runge, Edward F. Detroit
Rupprecht, Emil F. (M) Detroit
Ruskin, I. W. Detroit
Ruskin, Samuel H. Detroit
Russell, John C. Detroit
Ryan, Charles F. Detroit
Ryan, W. D. Detroit
Rydzewski, Joseph B. Detroit
Ryerson, Frank L. Detroit

Sachs, Herman K. (M) Detroit
Sack, A. G. (M) Detroit
Sa'di, Lutfi Detroit
Sadowski, Roman Detroit
Sage, Bernard A. (M) Detroit
Sage, Edward O. Detroit
Sage, Thomas Detroit
Sager, E. L. Detroit
St. Amour, Hector J. Detroit
St. Louis, R. J. River Rouge
Sakorraphos, Stelios N. Detroit
Salchow, Paul T. Detroit
Salowich, John N. (M) Detroit
Saltzstein, Harry C. Detroit
Sand, Harry H. (M) Detroit
Sander, I. W. Detroit
Sanders, Alex W. Detroit
Sanders, John H. (M) Detroit
Sanderson, Alvord R. Grosse Pointe Park
Sanderson, Joseph L. (M) Detroit
Sanderson, Suzanne Detroit
Sandler, Nathaniel (M) Detroit
Sands, G. E. Detroit
Sandweiss, David J. Detroit
Sanford, Hawley S. (M) Detroit
Sargent, Wm. R. Detroit
Sauk, John J. (M) Detroit
Sauter, Simon H. Detroit
Savignac, Eugene M. (M) Detroit
Scarney, Herman D. (M) Detroit
Schaefer, Robert L. (M) Detroit
Schaeffer, Martin Detroit
Schembeck, I. S. Detroit
Schenden, A. J. Melvindale
Schiller, A. E. Detroit
Schilling, Charles E. Detroit
Schinagel, Geza Detroit
Schirack, Ray Detroit
Schlacht, George F. Romulus
Schlafer, Nathan H. Detroit
Schlemer, John H. Detroit
Schlesinger, Henry (M) Detroit
Schmidt, Harry E. (M) Dearborn
Schmidt, J. Robert (M) Detroit
Schmidt, Milton R. (M) Trenton
Schmier, Burton L. Detroit
Schmitt, Norman L. Detroit
Schneck, Robert J. Detroit
Schneider, Curt P. (M) Detroit
Schoenfield, Gilbert D. Detroit
Schorr, Robert L. (E) Detroit
Schooten, Sarah S. Detroit
Schreiber, Frederick Detroit
Schrier, C. F. (M) Detroit
Schroeder, Carlisle F. (M) Detroit
Schug, Richard H. (M) Detroit
Schulte, Carl H. Detroit
Schultz, Ernest C. Detroit
Schultz, Robert F. (M) Detroit
Schwartz, Ben Detroit
Schwartz, H. Allen Detroit
Schwartz, Louis A. (M) Detroit
Schwartz, Oscar D. (M) Detroit
Schwartzberg, Joseph A. (M) Detroit
Schweigert, C. F. (M) Detroit
Sciarrino, Stanley V. Detroit
Scott, R. J. (M) Detroit
Scott, Wm. J. Grosse Pointe Farms
Scruton, Foster D. Detroit
Seabury, Frank P. Detroit
Secord, Eugene W. Detroit
Seeley, James B. Dearborn
Seeley, Ward F. Detroit
Segar, Lawrence F. Detroit
Seibert, Alvin H. Grosse Pointe Park
Seiferlein, Archie L. (M) Detroit
Selby, C. D. Detroit
Sellers, Charles W. Detroit
Sellers, Graham Detroit
Selling, Lowell Detroit
Selman, J. H. Detroit
Sewell, George S. Detroit
Shafarman, Eugene Detroit
Shaffer, Joseph H. (M) Duluth, Minn.
Shaffer, Loren W. Detroit
Shafter, Royce R. Detroit
Shankwiler, Reed A. Detroit
Shannon, Wm. F. (M) Detroit
Shanoski, Stanley J. (M) Detroit
Shapiro, I. Allen (M) Detroit
Shapiro, Jacob (M) Detroit
Shapiro, Oscar U. Detroit
Shapiro, Reuben I. (M) Detroit
Sharp, Martin C. Detroit
Sharrer, Charles H. Detroit
Shaw, Norman D. Dearborn
Shaw, Robert G. Detroit
Shawan, H. K. Detroit
Shebasta, Emil (M) Muskegon
Sheldon, John A. Detroit
Shelton, C. F. (M) Detroit
Sheppard, Emma L. W. Detroit
Sheppard, Wm. B. (M) Pensacola, Fla.
Sherman, Boudana B. Detroit
Sherman, Louis L. Detroit
Sherman, Wm. L. Detroit
Sherrin, Edgar R. (M) Detroit
Sherwood, DeWitt L. Detroit
Shewchuk, Alexander P. (M) Detroit
Shields, W. L. Detroit
Shifrin, Peter G. (M) Detroit
Shiovitz, Louis (M) Detroit
Shipton, W. Harvey Detroit
Shlain, Benjamin Detroit
Shoenfield, Adolph Detroit
Shore, O. J. Detroit
Shorney, Brain T. Detroit
Shotwell, Varlos W. Detroit
Shulak, Irving B. (M) Detroit
Shumaker, Edw. J. (M) Detroit
Shurley, Burt R. Detroit
Sickels, Edward W. (M) Detroit
Siddall, Roger S. Detroit
Sieber, Edward H. Dearborn
Siefert, John L. (M) Detroit
Seifert, Wm. A. Detroit
Siegel, Henry (M) Detroit
Silvarman, I. Z. Detroit
Silver, Israel W. Detroit
Silverman, M. M. Detroit
Simon, Emil R. Detroit
Simons, Edward J. (M) Detroit
Simpson, C. E. Detroit
Simpson, H. Lee Detroit
Singer, Floyd W. Detroit
Sippola, Geo. W. Detroit
Sisson, John M. Detroit
Siwka, Isidore J. Detroit
Skinner, W. Clare Detroit
Skolnick, Max H. (M) Detroit
Skrzycki, Stephen S. Detroit
Skully, E. J. Detroit
Sladen, Frank J. Detroit
Slahetka, Vincent (M) Detroit
Slate, Raymond N. Detroit
Slaughter, Fred M. Detroit
Slaugenhaupt, J. G. Detroit
Slazinski, Leo W. Detroit
Slipson, Edith G. Detroit
Slevin, John G. (M) Detroit
Sliwin, Edward P. (M) Detroit
Small, Henry (M) Detroit
Smeck, Arthur R. Detroit
Smeltzer, Merrill (M) Detroit
Smith, Charles E. Detroit
Smith, Clarence V. Detroit
Smith, Claude A. River Rouge
Smith, F. Janney Detroit
Smith, Gerrit C. Detroit
Smith, Henry L. Detroit
Smith, J. Allen (M) Detroit
Smith, James A. Detroit
Smith, Vine L. Detroit
Smyka, Edward J. (M) Detroit
Smyth, Charley J. Eloise
Snedeker, Bernard C. (M) Detroit
Snow, L. W. Northville
Snyder, Arthur M. Detroit
Socall, Charles J. (M) Detroit
Sokolov, Raymond A. (M) Detroit
Somers, Donald C. (M) Detroit
Sonda, Lewis P. Detroit
Sorock, Milton L. (M) Detroit
Spademan, Loren C. Detroit
Spalding, Edward D. (M) Detroit
Sparling, Harold I. (M) Northville
Sparling, Irene L. Northville
Speck, Carlos C. Allen Park
Spector, Maurice J. (M) Detroit
Spero, Gerald D. Detroit
Sperry, Frederick L. Detroit
Spiro, Adolph (M) Detroit
Springborn, B. R. Detroit
Sprunk, Carl (M) Detroit
Sprunk, John P. Detroit
Spurrier, Ethelbert (M) Detroit
Squires, W. H. Eloise
Stafford, Frank W. J. Detroit
Stalker, Hugh Grosse Pointe
Stamell, Benjamin B. (M) Detroit
Stamwell, Meyer (M) Unknown
Staniszowski, Casimir Detroit
Stanton, James M. Detroit
Stanton, Myron Detroit
Stapleton, Wm. J., Jr. Detroit
Starrs, Thomas C. Detroit
Steele, Hugh Detroit
Stefani, E. L. Detroit
Stefani, Raymond T. (M) Detroit
Steffes, Everett M. (M) Berkley
Stein, Edward (M) Detroit
Stein, Albert H. (M) Detroit
Stein, Emory Detroit
Stein, Saul C. (M) Van Dyke
Steinbach, Henry B. Detroit
Steinberger, Eugene Detroit
Steiner, Gabriel Detroit
Steiner, Louis J. Detroit
Steiner, Max (M) Detroit
Steinhardt, Milton J. (M) Detroit
Stellhorn, Chester E. Detroit
Stellhorn, Mary Christine Detroit
Sterba, Richard Detroit
Sterling, Lawrence Detroit
Sterling, Robert R. Detroit
Stern, Harry L. Detroit
Stern, Leonard H. Detroit
Stern, Louis D. Detroit
Stewart, Thomas O. Detroit
Stiefel, Daniel M. Detroit
Stirling, Alex M. Detroit
Stith, Dwight E. Detroit
Stobbe, Godfrey (M) Detroit
Stockwell, B. W. (M) Detroit
Stokfisz, T. (M) Detroit
Stout, Lindley H. Detroit
Straith, Claire L. Detroit
Strand, Martin E. (M) Dearborn
Stricker, Henry D. Detroit
Strickroot, Fred L. (M) Detroit
Strohschein, Don F. Detroit
Stubbs, C. T. Detroit
Stubbs, Harold W. Detroit
Stuecheli, Milton B. Detroit
Sugar, David I. Detroit
Sugarman, Marcus H. (M) Detroit
Sullivan, Hugh A. Detroit
Summers, Wm. S. Detroit
Summus, Wm. A. (M) Detroit
Surbis, John P. Detroit
Sutherland, J. M. Detroit
Swanson, Carl W. Detroit
Swanson, Cleary N. Detroit
Swanson, R. G. (M) Detroit
Swift, Karl L. Detroit
Switzer, Bertrand C. Detroit
Szappanyos, Bela T. Detroit
Szedja, J. C. (M) Detroit
Szilagyi, Emerick D. Detroit
Szmigiel, A. J. Detroit

Tamblyn, E. J. Detroit
Tann, H. E. Detroit
Tapert, Julius C. Detroit
Tasker, Helen Detroit
Tassie, Ralph N. Detroit
Tatelis, Gabriel Detroit
Taylor, Ivan B. (M) Detroit
Taylor, Nelson M. (M) Grosse Pointe
Taylor, Reu Spencer Detroit
Tear, Malcolm J. (M) Detroit
Teitelbaum, Myer (M) Detroit
Tenaglia, Thomas A. (M) Ecorse
Tenerowicz, Rudolph G. Detroit
Test, Frederick C. II Detroit
Texter, Elmer C. Detroit
Thompson, Alderman Detroit
Thompson, H. E. Detroit
Thompson, H. O. (M) Detroit
Thompson, W. A. Detroit
Thomson, Alexander Detroit
Thornell, Harold E. Detroit
Thorstad, Merrill Detroit
Thosteson, George C. Detroit
Thurston, Roger G. (M) Detroit
Tichenor, E. D. Detroit
Toepel, Otto T. (E) Detroit
Tomsu, Charles L. Detroit
Top, Franklin H. Detroit
Townsend, Frank M. Detroit
Trask, Harry D. Detroit
Tregenza, W. Kenneth (M) Detroit
Troester, George A. (M) Detroit
Trombino, James F. Detroit
Trombley, Bryan Detroit
Trombley, Joseph J., Jr. (M) Detroit
Troxell, Emmett C. Detroit
Truszkowski, E. G. (M) Detroit
Trythall, S. W. Detroit
Tufford, Norman G. Detroit
Tulloch, John (M) Detroit
Tupper, Roy D. Detroit

Turbett, Claude W. Detroit
Turcotte, Vincent J. Detroit
Turkel, Henry Detroit
Tuttle, Wm. M. (M) Detroit
Tyson, Wm. E. E. Detroit

Ujda, Chester J. Wayne
Ulbrich, Henry L. Detroit
Ulch, Harold W. Detroit
Ulrich, Willis H. (M) Detroit
Umphrey, Clarence E. Detroit
Usher, William K. Detroit

Vale, C. Fremont Detroit
VanAuken, Edward A. (M) Detroit
Van Baalen, M. R. Detroit
Van Gundy, Clyde R. Detroit
Van Heldorf, Harry Detroit
Van Nest, A. E. Detroit
Van Rhee, George Detroit
Van Riper, Steven L. Detroit
Vardon, Edward M. Detroit
Vasu, V. O. Detroit
Vergosen, Harry E. (M) Detroit
Vincent, James L. Detroit
Virga, George M. (M) Detroit
Voegelin, Adolph E. Detroit
Vogel, Hymen A. Detroit
Vokes, Milton D. Detroit
Von der Heide, E. C. Detroit
Vossler, A. E. Detroit
Vreeland, Emerson Detroit

Waddington, Joseph E. G. (E) Detroit
Wadsworth, George H. (M) Detroit
Waggoner, C. Stanley Detroit
Waggoner, Lyle G. Detroit
Wainger, M. J. Detroit
Wainstock, Michael Detroit
Waldbott, George L. Detroit
Walker, Enos G. (M) Detroit
Walker, J. Paul Detroit
Walker, Leo W. Detroit
Walker, Roger V. Detroit
Wallace, S. Willard Detroit
Walls, Arch Detroit
Walser, Howard C. Detroit
Walsh, Charles R. Detroit
Walsh, Francis P. Detroit
Walters, Albert G. Detroit
Waltz, Frank D. B. Detroit
Waltz, Paul J. Detroit
Ward, Wm. K. Detroit
Warden, Horace F. W. Detroit
Warner, P. L. Detroit
Warner, Harold W. (M) Detroit
Warren, Lloyd P. Detroit
Warren, Wadsworth (M) Detroit
Warren, Kenneth W. Detroit
Wasserman, Lewis C. Detroit
Waszak, Charles J. Detroit
Watson, Douglas J. (M) Detroit
Watson, Harwood G. Dearborn
Watson, J. Edwin Detroit
Watson, Robert W. Highland Park
Watts, Frederick B. (M) Detroit
Watts, John J. Detroit
Wayne, M. A. Detroit
Weaver, Clarence E. Detroit
Weaver, Delmar F. Grosse Pointe
Webster, John E. (M) Detroit
Weed, Milton R. (M) Detroit
Wehenkel, Albert M. Detroit
Weiner, M. B. Detroit
Weingarden, David H. Detroit
Weinstein, Jacob Detroit
Weisberg, A. Allen Detroit
Weisberg, Jacob (M) Detroit
Weiser, Frank A. Detroit
Weiss, C. P. (M) Detroit
Weiss, J. G. (M) Detroit
Welch, John H. Detroit
Weller, Charles N. Detroit
Wells, Martha Detroit
Weltman, Carl G. Detroit
Wendel, Jacob S. Detroit
Wenzel, Jacob F. Detroit
West, Howard Gaige Detroit
Weston, Bernard Detroit
Weston, Earl E. Detroit
Weston, Horace L. (M) Detroit
Westover, Charles Plymouth
Weyher, Russell F. Detroit
Whalen, Neil J. Detroit
Wharton, Thomas V. Wyandotte
Wheeler, Stewart C. (M) Detroit
Whinnery, Randall A. Detroit
White, Milo R. Detroit
White, Milton W. Detroit
White, Prosper D., Jr. (M) Detroit
White, Theodore M. Detroit
Whitehead, L. S. (M) Detroit
Whitehead, Walter K. Detroit
Whiteley, Robert K. (M) Detroit
Whitney, Elmer L. Detroit
Whitney, Rex E. (M) Detroit
Whittaker, Alfred H. Detroit
Wiant, R. E. Detroit
Wickham, A. B. Detroit
Wiechowski, Henry (M) Detroit
Wiener, I. (M) Detroit
Wietersen, Fred K. (M) Detroit
Wight, Fred B. Detroit
Wilcox, Leslie F. (M) Detroit
Wilkinson, Arthur P. Detroit
Williams, C. J. Detroit
Wills, J. N. Detroit
Willson, Wesley W. (M) Detroit
Wilner, Irvin Detroit
Wilson, Chas. Stuart (M) Detroit
Wilson, Frederic S. Detroit
Wilson, Gerald A. Detroit
Wilson, M. C. (M) Detroit
Wilson, Walter J. Detroit
Wilson, Walter J., Jr. (M) Detroit
Winfield, James M. (M) Detroit
Winton, George L. (M) Detroit
Wiren, Lennart W. Detroit
Wishropp, Edward A. (M) Grosse Pointe
Wisner, Harold E. Detroit
Wissman, H. C. Detroit
Wittenberg, Arthur A. Detroit
Wittenberg, Samson S. Detroit
Wittenberg, Sydney S. Detroit
Witter, Frank C. Detroit
Witter, Joseph A. (M) Detroit
Witus, Carl (M) Detroit
Witus, Morris Detroit
Witwer, Eldwin R. Detroit
Wolfe, Max O. Detroit
Wollenberg, Robert A. C. Detroit
Wood, Kenneth A. (M) Detroit
Woodburne, H. L. (M) Detroit
Woodry, Norman L. Detroit
Woods, H. B. Brown City
Woods, W. Edward Detroit
Woodworth, Wm. P. Detroit
Worzniak, Joseph J. Wyandotte
Wreggit, W. R. (M) Detroit
Wruble, Joseph Detroit
Wunsch, Richard E. (M) Detroit
Wygant, Thelma Dearborn

Yesayian, H. G. Detroit
York, Frederick P. (M) Detroit
Yott, Wm. J. (M) Detroit
Young, Donald Andrew (M) Detroit
Young, Donald C. (M) Detroit
Young, Lloyd B. (M) Detroit
Young, Viola M. Detroit

Zawadzki, Edward S. (M) Dearborn
Zbudowski, A. S. (M) Hamtramck
Zbudowski, Myron R. (M) Hamtramck
Zemens, Joseph L. Detroit
Zerbi, Victor Detroit
Zielinski, Charles J. Detroit
Zimmerman, Israel J. (M) Detroit
Zimmerman, R. L. Detroit
Zinn, George H. Detroit
Zinterhofer, John Detroit
Zinterhofer, Louis Detroit
Zlatkin, Louis Detroit
Zuelzer, Wolfgang Detroit
Zukowski, Sigmund A. (M) Detroit

Wexford County

Albi, R. W. (M) Gary, Ind.
Daugherty, R. (M) Cadillac
Hoagland, F. L. (M) Unknown
Holm, Augustus Leroy
Holm, Benton Cadillac
Hoverter, J. W. Evart
Inman, J. C. (M) Lake City
Landy, George R. Cadillac
Lommen, Ralph Manton
McCall, James Lake City
McManus, Edwin Mesick
Masselink, H. J. McBain
Merritt, C. E. Manton
Mills, Robert E. Boon
Moore, G. P. (M) Cadillac
Moore, Sair C. Cadillac
Murphy, Michael R. Cadillac
Purdy, Calvin S. Buckley
Seltzer, Sol N. (M) Marion
Showalter, Laurence E. (M) Cadillac
Smith, Fred R. (M) Lake City
Smith, Wallace J. Cadillac
Tornberg, Gordon C. Cadillac

RAGWEED POLLEN SURVEY

The report of the 1945 state-wide ragweed pollen survey is now available from the Michigan Department of Health. Michigan had much less ragweed pollen last summer and for a shorter season than in 1944.

Because the majority of hay fever sufferers feel no discomfort until the pollen concentration is above 100 grains per cubic yard of air, the pollen season is defined as the number of days when the count is above 100. Last summer the pollen season varied from twenty-eight days in Hillsdale to one day in Houghton.

The Upper Peninsula and the northern half of the lower peninsula have lower pollen concentrations and a shorter pollen season than southern Michigan. This has been observed in each of the six pollen surveys.

The greatest amount of pollen at each pollen-collecting station was found between August 27 and September 8. Pollen counts seldom reach 100 before August 15 and drop quickly with the first killing frosts.

Of the areas where pollen was collected in 1945, the shortest pollen season was observed in Houghton where the pollen count went over 100 grains only one day; Isle Royale and Ontonagon with two days; St. Ignace, Marquette and Rogers City with three days each; and Sault Ste. Marie with four.

The longest pollen season of twenty-eight days occurred in Hillsdale; Lansing and Coldwater had twenty-six each; Saginaw and Flint twenty-four, and Detroit, twenty-three.

The seventh ragweed pollen survey will be conducted this summer. Pollen will be collected at about fifty places in the state and counts for twenty-four hour periods will be given to the public through news agencies.

Michigan's Department of Health

WM. DE KLEINE, M.D., Commissioner, Lansing, Michigan

NEW DYSENTERY STRAIN IN MICHIGAN

In June the Michigan Department of Health Laboratories isolated a strain of dysentery which is new to Michigan, the Sach's Q 711. This organism is fairly common in North Africa. The organism was recovered from a case of acute baccilary dysentery in a nine-year-old boy in Bay County.

MARRIAGES

Marriages in Michigan hit an all-time high during the first three months of 1946 when 15,379 were recorded. This is an 88 per cent increase over the same period of 1945 and well above the five year average of 9,479. In 1942, Michigan's peak year for marriages, there were 11,652 marriages reported in the first three months.

Breaking a ten-year record in which March was the lowest month for marriages, the largest number of the 1946 marriages, 6,128 in all, was reported in March.

DR. LILLIAN R. SMITH RETIRES

Dr. Lillian R. Smith, director of the Bureau of Maternal and Child Health, is retiring on June 30, 1946. Dr. Smith came to the Michigan Department of Health in March, 1924, to serve as prenatal consultant. In 1925 she became director of the Bureau.

Dr. Goldie B. Corneliuson, who has been associate director of the Bureau for the past four years, will succeed Dr. Smith.

EMIC COMPLETES THREE YEARS

Hospital and medical care has been authorized in Michigan for 44,634 wives and infants of servicemen since the Emergency Maternity and Infant Care program began in Michigan on May 27,1943. For this care the federal government has spent $3,755,113.

The average cost for each maternity case is $98.06 and for each sick infant, $60.83.

The peak of applications came in August, 1944, when 1,871 were received. During 1946 applications have averaged 1,631 a month.

A total of 3,243 physicians and 185 hospitals in Michigan participate in this program.

MALARIA

A total of 445 cases of malaria was reported to the Michigan Department of Health between January 1 and June 6. The interesting thing about these 445 cases is that they are all cases of recurrent malaria contracted outside of Michigan. There have been no cases of malaria among our resident citizens. This is to be expected, of course, since there have been no mosquitoes during this period. There is a possibility that there will be small localized outbreaks of malaria during the mosquito season since the southern half of the lower peninsula of Michigan has a high percentage of Anopheles mosquitoes. State and local health departments are maintaining alphabetical files on these cases of recurrent malaria so that the location of possible foci of infection is known. If malaria develops among the citizens of Michigan, it can be brought under control rapidly by the use of DDT and other agents for the destruction of mosquitoes.

SWIMMERS' ITCH CONTROL PROGRAM

On June 15 two units from the Michigan Stream Control Commission resumed the snail-eradication program in northern Michigan. This is the seventh summer that the commission has sent men and chemical distributing equipment into the northern resort country to help beach owners control "swimmers' itch."

This will probably be the last summer for the program, according to Milton P. Adams, secretary of the commission, since it was started as a demonstration. Now that the value of chemical treatment has been proved, the commission feels that responsibility in the future should be assumed by individual resort proprietors and interested groups.

Chemical treatment of infected water areas is done with a portable chemical-mixing and distributing unit, designed and built by Professor E. P. Wiedenhoefer of Michigan College of Mining and Technology, a summer employe of the commission. This unit is mounted in an ordinary flat bottom row boat. Into water, taken from over the side of the boat by pump, is injected a mixture of dry chemical which consits of about five parts of copper sulfate (snow grade) and one part of hydrated lime. The mixture passes through the discharge pipe from the pump out over the stern of the boat and is fed from a pipe "header" attached to the stern of the boat onto the lake bottom over a strip of beach ten to twelve feet in width created by the forward movement of the boat. A number of lengths of hose attached to the header and trailing from the rear of the boat are weighted at the outlet end so as to introduce directly on the sand bottom approximately a six-inch layer of copper sulfate solution. This kills the snails within a few hours, without injury to human beings, free swimming fish, clams and other aquatic life. With a thorough "kill" of the snail hosts and, with them, their parasite "chains," water itch disappears until a new crop of snails returns, generally in from two to four years.

PROTECTING VACATION VISITORS

Testing of roadside water supplies, discontinued in most counties during the war, is being resumed this year as city, county, district and state health departments begin the roadside and resort sanitation program which will

(Continued on Page 970)

Effective Against CHIGGERS

(RED BUGS)

SULFUR FOAM APPLICATORS

Convenient Cloth Applicators
Impregnated with Sulfur and Soap

DURING THE COMING SEASON this timely prescription product will bring relief and grateful thanks from patients suffering from chiggers.

Sulfur Foam Applicators are indicated whenever sulfur is to be used externally.

They have the advantage of . . .

. . . even dispersal of fine sulfur particles
. . . convenience—they are easy to use
. . . elegance—no grease, mess or stain
. . . safety, minimizing the possibility of sulfur dermatitis

Complete directions with each package

TREATMENT

PROPHYLAXIS

SULFUR FOAM APPLICATORS

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PROTECTING VACATION VISITORS

(Continued from Page 968)

touch each of Michigan's eighty-three counties and some 9,000 miles of highways.

Water supplies will be inspected and samples tested, sewage disposal methods checked, camps and resorts inspected, food and milk supplies and handling facilities checked, swimming places approved and polluted lakes and streams posted with warning signs.

The purpose of this program is to make sure that all sanitary facilities of rural and resort areas, which normally serve a sparse population, are prepared to meet the needs of millions of summer visitors.

Testing of roadside water supplies was begun in May in an effort to get all supplies posted before the heavy tourist travel began. The majority of the wells tested are in filling stations and roadside parks; the aim of the project is to test any well which might attract tourists.

A health department sanitarian first inspects the well to see if its construction is proof against surface water or other pollution. He then takes a sample of water for a laboratory test. If the well is found safe the 8 by 10 inch sign is posted: "This Water Safe for Drinking . . . Michigan Department of Health."

Resorts, hotels, children's camps, tourist camps and other recreational centers bidding for the tourist trade are being inspected.

In co-operation with the State Stream Control Commission, bathing beaches are inspected and where there is danger of pollution, laboratory tests are made. If the degree of pollution is a health menace, a warning sign is posted on the beach.

NEWS OF PERSONNEL

On May 1, E. J. Brenner, M.D., returned as director of the Alger-Schoolcraft Health Department. Dr. Brenner was director of this department from 1937 until his entry into the Army in 1942. From 1930-36 he served as secretary of the Northern Michigan Medical Society.

* * *

Robert G. Wetterstroem, M.D., was appointed director of the Iron-Ontonagon District Health Department effective May 16, 1946. Dr. Wetterstroem received his M.D. from the College of Medicine, University of Cincinnati. He was on active duty with the U. S. Public Health Service from July 1, 1941, until his acceptance of this position.

* * *

C. Dale Barrett, Jr., M.D., was appointed director of the Ottawa County Health Department effective May 13, 1946. Dr. Barrett, who received his M.D. from the Wayne University College of Medicine, has just returned from service with the Army Medical Corps. He is the son of Dr. C. D. Barrett, director of the Ingham County Health Department.

* * *

On June 1, George A. Hays, M.D., returned to Flint as city health officer. Dr. Hays held this position from 1937 until he entered military service in 1942.

INCIDENCE OF COMMUNICABLE DISEASE

Disease	*May, 1946*	*May, 1945*	*7-year median*
Diphtheria	27	32	14
Gonorrhea	1,085	1,070	761
Lobar Pneumonia	93	74	210
Measles	5,134	1,296	3,355
Meningococcic Meningitis	21	19	8
Pertussis	607	277	915
Poliomyelitis	1	0	0
Scarlet fever	755	1,270	1,270
Smallpox	0	0	2
Syphilis	1,478	1,526	1,276
Tuberculosis	450	448	514
Typhoid fever	4	5	4
Undulant fever	15	29	11

VITAL STATISTICS—FIRST QUARTER 1946

Births in Michigan for the first three months of 1946 decreased 1 per cent and deaths increased 5 per cent from the same period of 1945.

Each of the four leading causes of death increased its toll over the first three months of 1945 and was above the five-year average.

Deaths from motor vehicle accidents jumped 70 per cent over 1945.

	First Quarter		
	1946	1945	Five-Year Average
Births	25,263	25,631	26,478
Deaths	14,179	13,519	14,254
Infant deaths (under 1 year)	955	1,081	1,176
Maternal deaths (140-150)	40	39	60
TEN LEADING CAUSES OF DEATH DURING THE QUARTER			
Heart disease (90-95)	4,727	4,396	4,497
Cancer (45-55)	1,736	1,687	1,637
Apoplexy (83.1, 83.2)	1,353	1,273	1,289
Accidents (169-195)	828	759	817
Motor vehicle traffic (170)	385	226	298
Other accidents	443	533	519
Inflammation of kidney (130-132)	669	678	735
Pneumonia (107-109)	653	639	870
Tuberculosis (13-22)	458	416	463
Diabetes (61)	430	372	398
Premature births (159)	303	297	329
Hardening of arteries (97)	247	283	276
CERTAIN COMMUNICABLE DISEASE DEATHS			
Diphtheria (10)	13	15	6
Infantile paralysis (36)	1	1	1
Influenza (33)	155	63	184
Measles (35)	28	2	15
Meningitis (epidemic) (6)	14	15	20
Scarlet fever (8)	1	3	8
Typhoid fever (1)	3	....	1
Whooping Cough (9)	8	11	16

Figures in parentheses indicate International List numbers, 1939 revision.

Little Joe Genius says—

I see where Dr. Mountain of the U. S. Public Health Service complains that heart disease, cancer, and diabetes are on the increase, and the reason given is that more people live to be sixty-five. What a black mark against the present day system of medical care!

Woman's Auxiliary

BAY COUNTY

The April meeting of the Bay County Auxiliary was held in the doctors' staff room at General Hospital. Dessert was served to the twenty-one members present. The table was centered with an Easter egg tree fashioned from a barberry bush, decorated with colored eggs, with pastel-colored egg vases holding small spring flowers on either side.

Mrs. H. L. Woodburne reviewed the book "Outside Eden" by Isabelle Rorick. Mrs. A. L. Ziliak, Mrs. E. S. Huckins and Mrs. Harold Heuser were hostesses for the evening.

The final meeting of the year was held at the home of Mrs. P. R. Urmstron in May. Dessert was served by the hostesses, Mrs. R. E. Scrafford, Mrs. E. C. Miller and Mrs. C. W. Reuter. The regular business meeting followed, and the following new officers were installed: Mrs. Walter S. Stinson, president; Mrs. J. Norris Asline, president-elect; Mrs. C. W. Reuter, vice president; Mrs. F. J. Chapin, secretary; and Mrs. Roy C. Perkins, treasurer. Mrs. C. L. Hess acted as installing officer. The Nominating Committee was Mrs. A. L. Ziliak, chairman, Mrs. E. S. Huckins and Mrs. J. Howard McEwan.

Bridge was enjoyed by the twenty-eight members present.—Mrs. J. H. McEwan, *Press Chairman*

KENT COUNTY

Regular meetings have been held this year. Early in the year William Jakad discussed the juvenile delinquency problems in Kent County.

In January Dr. Samuel Hartwell of the Grand Valley Children's Center was guest speaker. Dr. William De Kleine, State Health Commissioner and former National Medical Director for the Red Cross, addressed the Woman's Auxiliary in February. For the March meeting, Dr. A. J. Baker spoke on "Political Medicine." Dr. Ralph Blocksma discussed the "panel system" in England as he observed it.

The annual spring tea was held at the home of Mrs. J. Winslow Holcomb. Dr. Robert J. McCandliss sang "In the Silent Night," "Ich Liebe Dich," "Love Is the Wind," and "Uncle Rome." Mrs. McCandliss, in her talk on "China—Past and Present," gave an historical background on China's disunity and a hope for a united China.

Presiding at the tea urns were Mrs. Willis L. Dixon and Mrs. Merrill Wells. Mrs. David B. Davis, decorations chairman, used white tapers centered with a bouquet of white flowers on the "tea" table.

The Auxiliary concluded its activities for the current season with an annual luncheon which was held in the Browning Hotel.

Mrs. Thomas C. Irwin, chairman, was assisted by Mrs. Floyd F. Gibbs as co-chairman. Spring flowers were used to decorate the tables.

Dr. Bernard J. Mulder was introduced by Mrs. Harry Lieffers, chairman of the program committee, and spoke of "Waiters on Tables."

Mrs. Garrett E. Winter was in charge of reservations.

Guests of honor were Dr. William J. Butler, president of the Kent County Medical Society, and Mrs. Horace L. French, past president of the Woman's Auxiliary to the Michigan State Medical Society.—Marguerite B. Kooistra, *Press Chairman.*

SAGINAW COUNTY

The October meeting was held at the Saginaw Tennis Club. Following the luncheon, Mrs. Lohr reviewed the novel, "Latchstring Out," by Skulda V. Baner. In November, Mrs. E. D. MacKinnon discussed "Ceramics" and exhibited some of her work for the County Medical Society Auxiliary at the home of Mrs. William B. Kerr. Mrs. James H. Curts and Mrs. F. E. Luger assisted the hostess.

A May Day motif was used at the County Medical Society Auxiliary benefit bridge at the new Weadock Nurses Home at St. Mary's Hospital. Spring and summer fashions were modeled by Mrs. James W. MacMeekin, Mrs. Gerald L. Ackerman, Mrs. Louis D. Goman, Mrs. Frank J. Gugino, Mrs. A. P. Murphy, Mrs. George W. Stewart, Mrs. James H. Curts, Mrs. Oliver W. Lohr, Mrs. Ralph S. Jiroch and Mrs. Arthur E. Leitch.

Mrs. Gunther E. Tiedke directed the arrangements. Proceeds from the party will be given to the Home.

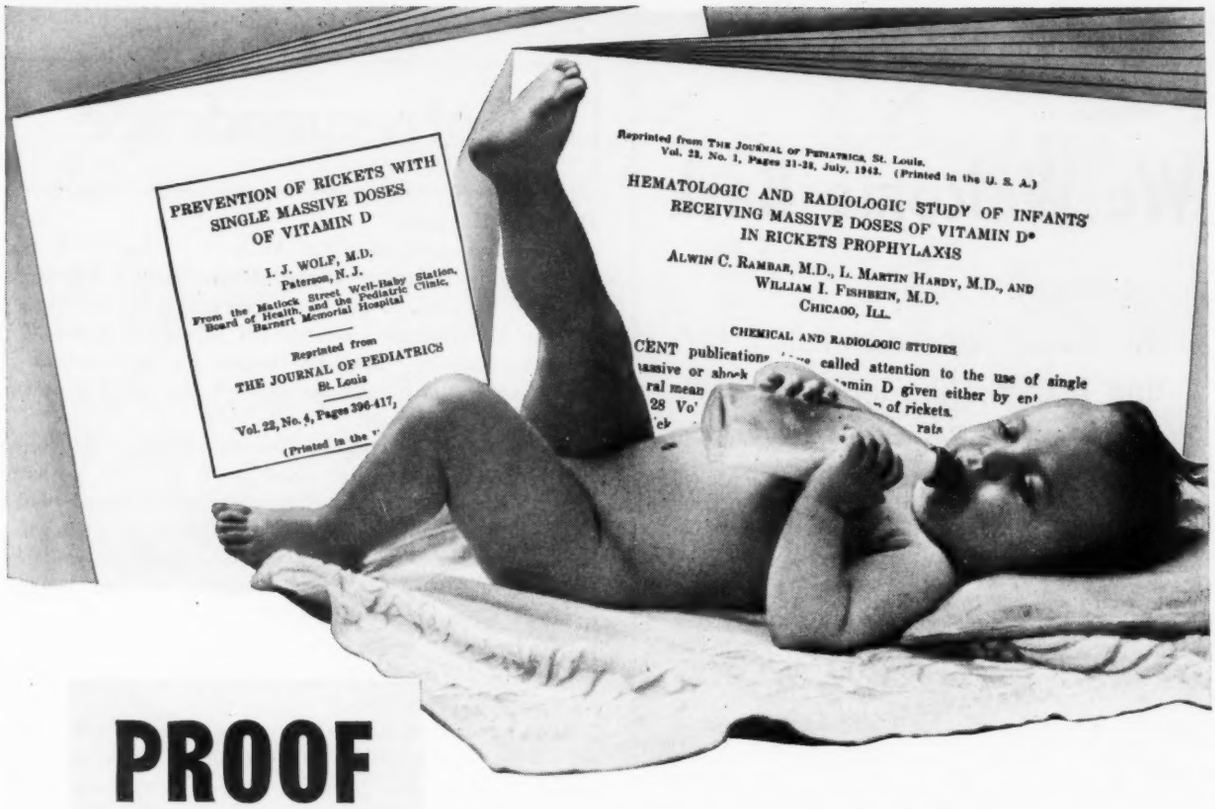
Plans to conduct a year-around educational program for the Saginaw unit of the Field Army of the American Cancer Society were made by the Saginaw County Auxiliary at the meeting held at the home of Dr. Madelene M. Donnelly. The program will deal with teaching the public that by early diagnosis of cancer, it can be cured with radium, surgery or x-ray.

Mrs. Frederick Pietz, chairman for the tuberculosis speech project, presented a cash award to Mary Maziany, ninth grade Weber student, who won first place in the state tuberculosis speech contest sponsored by the Michigan Medical Society Auxiliary and the Michigan Tuberculosis Association. Her teacher, Miss Margaret Hunter, was a guest.

Dr. Donnelly reviewed "Dolls and Puppets" by Max Boehn, and exhibited her fine collection of dolls, which has been nationally recognized.

An attractive arrangement of white flowers centered the refreshment table. Mrs. A. Carl Stander, Mrs. R. O. Northway and Mrs. D. V. Sargent assisted the hostess.

—Bertha F. Ely, *Publicity Chairman*



PROOF

of a revolutionary new concept in rickets prophylaxis

The epoch-making discovery that single monthly doses of high potency vitamin D give full antirachitic protection has been well substantiated by clinical application.

Wolf[1] states, "the administration of a single massive dose of vitamin D for the prophylaxis of rickets is not only of proved effectiveness, but also is safe and time-saving."

Rambar[2]. . ."no toxic clinical or laboratory findings occurred in any of the infants receiving this type of prophylaxis."

Each capsule of Infron Pediatric contains 100,000 U.S.P. Units of Vitamin D—Whittier Process—especially prepared for pediatric use.

Infron Pediatric is readily dispersible in the infant's feeding formula, milk, fruit juices, or water, and can also be given in cereal.

Infron Pediatric is economical—one package contains six monthly administrations, each in an easily opened capsule container.

REFERENCES

1. Wolf, I. J.: Prevention of Rickets With Single Massive Doses of Vitamin D, J. Ped. Vol. 22, No. 4 (April) 1943.

2. Rambar, A. C.; Hardy, L. M. and Fishbein, W. I.: Hematologic and Radiologic Study of Infants Receiving Massive Doses of Vitamin D in Rickets Prophylaxis, Jl. Ped. Vol. 23, No. 1 (July) 1943.

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Once a month administration provides adequate dosage for rickets prophylaxis

Please send literature and a supply sufficient for 6 months clinical trial.

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DR. _____

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CITY _____ STATE _____

Correspondence

Dear Dr. Haughey:

Several months ago, Dr. William Cadbury left San Francisco for Lingnan University in Canton, China, to continue his medical missionary work and to teach medicine to his students. He wanted to return to his life's work in Canton, where he treated his first patient in 1909. Later, he helped to establish the medical school of Lingnan University.

Dr. Cadbury arrived in Canton recently and found the University's hospital filled with destitute patients, and the medical school's library entirely without books. He was in a Japanese concentration camp in 1942 when he was informed that the Japanese sold his medical books for fuel.

Many friends have given all the medicine the University hospital required for one year. Unfortunately, we are unable to replenish the medical school's library to a very large degree.

It is my sincere hope that you will come to the rally of a fellow colleague by sending him a gratis subscription of your reliable JOURNAL OF THE MICHIGAN STATE MEDICAL SOCIETY. Through your contribution Dr. Chadbury will be able to teach with one of the fundamental instruments of medicine-up-to-date journals.

Dr. Cadbury will rejoice to learn that the medical profession is still co-operative, efficient, and ever ready with a helping hand when the occasion arises.

The good doctor's address is—Dr. William Cadbury, Lingnan University, School of Medicine, Canton, China. Thanking you, and may I hear from you soon?

Respectfully yours,
1ST LT. GEORGE D. FUNG, M.C.

Section 4
Madigan General Hospital
Fort Lewis, Washington

We are sure any donations of good books would be gratefully received. We have given a three-year subscription.—Editor.

Dear Dr. Haughey:

In the April, 1946, JOURNAL, I read with interest the page "What Do We Learn From New Zealand." I thought you might be interested in some of the observations I made while in that country. I must confess immediately that I was not only not impressed with my observations, but I was sure at that time that the entire system would not be acceptable to the American people. The cost was to my way of thinking, excessive. The type of care given was also below our standards. But the attitude of the doctors was so contrary to our own, I was so sure of its non-acceptance by our people that I lost interest.

The social security tax of New Zealanders is one half crown out of each pound earned. (The pound has twenty shillings and the crown has five.) To me this seemed

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just a bit too much. Of course other benefits were covered by that tax, but the cost of medical care was a large item.

The attitude of the doctors toward their patients was quite in contrast to that as displayed here. They were as busy as were the doctors here. Yet they seemed to treat their patients as though they were conferring a favor upon them when they rendered service. Dr. Meyer Tietlebaum of Detroit and myself met a fellow there and were frequent guests at his home. One night he was complaining of his troubles, and both Meyer and myself felt that he was showing some evidence of a coronary occlusion. Meyer called his physician, explained the case to him and tried to get an appointment. At first the doctor said three weeks, and after a little urging on Meyer's part, decided to see the patient in ten days. Another time a patient had a condition that strongly simulated an acute appendicitis. The best that doctor could do was two weeks.

The quality of the work was definitely of an inferior brand. Two very commonplace items emphasized the people's attitude toward the medical profession. The first is that when people become ill, they first seek aid from the chemist (druggist). I have heard one girl, who formerly worked for a doctor, advise her friend to see a certain chemist. When asked why she did this, she replied that it was very difficult to see doctors, and also the doctors were not interested in minor ailments. Also, the chemists were often better in this work. The second was the extreme efforts that the New Zealanders used in order to see an American doctor.

In one instance, a New Zealand physician prescribed some certain drug, and then told the patient he would have to get it from the Americans, as New Zealand did not have it.

The idea of being of service to your patient is not evident there. They see the doctor when it suits his convenience. The Saturday that I visited with a New Zealand doctor was spent at a tennis club. He informed me that his patients saw him when he wished. No work on Saturday afternoon, or all day Sunday. Also he had surgery (office) hours on only specified hours. He was not interested in emergencies.

The worst feature that I saw was the doctors' political interference with the running of the country. They are the most autocratic group possible. The doctors control the medical affairs from beginning to end. You cannot practice unless they so desire. You cannot even study medicine unless they approve. When I was there, they denied a number of students from entering the study of medicine, because the number of applicants would then increase the number of practitioners. This created a storm, but a useless storm, as the physicians were so powerful that they prevailed.

The health statistics are very excellent, but when you analyze them, you find that they are rigged. They never include the incidence of ill health among the Moaris. These are the native people and can be somewhat compared to our negro population, in the nature of health.

With these observations, I am certain that the quality of medical practice here will follow the same trend as it has in New Zealand. Once I knew of an attempt to scare our members with a threat to force upon us the New Zealand system. Now such an attitude would only make me smile.

Very sincerely yours,
ROBERT J. DOUGLAS

Muskegon, Michigan
May 13, 1946

What's What

100% MEMBERSHIP CLUB, JULY, 1946

Barry County.....J. K. Altland, M.D., Sec'y.
Branch County.....James Bailey, M.D., Sec'y.
Clinton County.....T. Y. Ho, M.D., Sec'y.
Gogebic County.....Wm. H. Wacek, M.D., Sec'y.
Huron County....J. Bates Henderson, M.D., Sec'y.
Ingham County.....Kenneth Johnson, M.D., Sec'y.
Jackson County.....H. W. Porter, M.D., Sec'y.
Lapeer County.....H. M. Best, M.D., Sec'y.
Livingston County.....Ray M. Duffy, M.D., Sec'y.
Mason County.....W. S. Martin, M.D., Sec'y.
Mecosta-Osceola-Lake Counties.....John A. White, M.D., Sec'y.
Menominee County....Wm. S. Jones, M.D., Sec'y.
Monroe County....Florence D. Ames, M.D., Sec'y.
Newaygo County.....H. R. Moore, M.D., Sec'y.
Northern Michigan....G. B. Saltonstall, M.D., Sec'y.
Ontonagon County.....W. F. Strong, M.D., Sec'y.
Sanilac County.....E. W. Blanchard, M.D., Sec'y.

Medical service plans are now organized in thirty-three of the forty-eight states and in process of organization in another eight states.

* * *

Douglas Donald, M.D., Detroit, addressed the Muskegon County Medical Society on "Agranulocytic Angina" on June 21 at the Occidental Hotel, Muskegon.

* * *

Ralph L. Fisher, M.D., and Morris Dukerman, M.D., Detroit, are authors of an original article, "Coronary Thrombosis," which appeared in JAMA, issue of June 1, 1946.

* * *

James Fyvie, M.D., of Manistique, recently released from the United States Army, has been honored by the French government with a *Croix de Guerre* citation. Congratulations, Dr. Fyvie!

* * *

Harold F. Falls, M.D., and Harry N. Jurow, M.D., of Ann Arbor are authors of an original article "Antepartum Vitamin K for Retinal Hemorrhage" which appeared in JAMA of May 18, 1946.

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Thomas Francis, Jr., M.D., Jonas Salk, M.D., and Wm. M. Brace, M.D., of Ann Arbor, are authors of an original article, "Vaccination Against Epidemic Influenza B," which appeared in JAMA of May 25.

* * *

J. S. DeTar, M.D., Milan, Chairman of the MSMS Public Relations Committee, addressed the Rotary Club of Otsego, Michigan, on June 26. His subject was "The Evils of Socialized Medicine."

* * *

Wilfrid Haughey, M.D., Battle Creek, addressed the Woman's Auxiliary of the Calhoun County Medical Society on June 5. His subject was "The Wagner-Murray-Dingell Bill." Dr. Haughey also addressed the Branch County Medical Society on May 14, on the same subject.

* * *

R. J. Hutchinson, M.D., of Grand Rapids, celebrated his 50th Anniversary in the practice of medicine on May 15. The Grand Rapids Herald eulogized Doctor Hutchinson, and stated, "Dr. Hutchinson is an institution in Grand Rapids, and the community sincerely congratulates him on his long-time service to humanity."

* * *

A class for expectant mothers is held under the sponsorship of the Wayne County Medical Society and the Detroit Board of Health on Thursdays at 2:00 p.m. in the David Whitney House, the Society's Headquarters. The only requirement to join the group is referral by the applicant's doctor.

* * *

H. A. Tressel, M.D., was honored by the Wakefield Rotary Club with a testimonial dinner on May 18 for his thirty-three years of service to the community. In addition, an open house was held at the Tressel residence with an invitation to all who desired to "take part in paying respects to Dr. and Mrs. Tressel."

* * *

James D. Bruce, M.D., of Ann Arbor, has donated $10,000 to the American College of Physicians, half to be used for a memorial to Dr. Alfred Stengel, Past President of the College of Physicians, and the remainder to establish a lectureship on preventive medicine. Dr. Bruce is a former President of the American College of Physicians.

* * *

The Role of Hormones in Sterility is the subject of the 1946 Schering Award, a competition open to undergraduate medical students. For the best thesis submitted on this subject, the Schering Corporation of Bloomfield, New Jersey will give an award of $500; for the second and third best papers, awards of $300 and $200, respectively, will be granted.

* * *

On April 1 Dr. Olin West retired as secretary and general manager of the American Medical Association, after almost a quarter of a century's service in that position. He is succeeded by George F. Lull, M.D.

Dr. West joined the American Medical Association's official family as field secretary in 1922, coming from

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Tennessee, where he was secretary of the State Board of Health. Soon afterward he was made secretary of the A.M.A., and in 1924 he became general manager also.

* * *

"Encore Theater" is the title of the new radio series dedicated to the medical profession by Schenley Laboratories, which opened over CBS June 4. This half-hour program is aimed to develop wider public understanding and appreciation of the contribution made by the medical profession and by medical research to the world's health and welfare. C. E. Dutchess, M.D., formerly of Detroit, is Medical Director of Schenley Laboratories, New York.

* * *

Ward L. Chadwick, M.D., of Grand Rapids, has been appointed by the American Academy of Pediatrics to serve in Denver, Colorado, as temporary Regional Director of the study of Child Health Services. Purpose of the study is to gather nation-wide data on child health facilities in local communities. Postwar planning will be based on this report. Dr. Chadwick will return to private practice in Grand Rapids after the survey is completed in two or three months.

* * *

Medical Vets request Autos. One hundred Detroit doctors who have been discharged from the armed services have been forced to rely on public transportation for professional calls because they have been unable to buy automobiles, according to the Wayne County Medical Society which adopted a resolution May 23 urging the Presidents of automobile companies to give their immediate personal attention to the problem and earmark certain cars for the medical veterans.

* * *

The Medical Supply Corporation of Detroit has recently expanded its service facilities by more than doubling present floor space. The adjacent building has been renovated and remodeled to merge with the present location at Woodward and Eliot to form one of the most modern and well-equipped surgical and medical supply centers in Michigan. F. A. Janusch, President, and P. T. Sawyer, Treasurer, are to be commended on this progressive step marking the firm's twenty-first year in business.

* * *

A. V. Avery, M.D., of Albion, was honored by his community at the conclusion of fifty-five years in the practice of medicine, on May 12. Quoting from the *Battle Creek Enquirer-News*—"When Dr. Avery began practicing medicine, he called on his patients by horse and buggy. He maintained a stable of two or three horses at all times to be prepared always for a rural call. With the advent of the automobile, he was the second person in town to buy a car. One thing he missed, however, in motor travel; he couldn't tie the reins around the whip standard and go to sleep after a busy night, confident the vehicle would take him back to his own garage as Dobbin always did."

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The MSMS Committee on Industrial Health sponsored the first Regional Industrial Health Conference in Bay City on June 5. The following program was held:

5:15 p.m. Tour of Chevrolet plant.

6:30 p.m. Pre-prandial hour and dinner at Wenonah Hotel.

8:00 p.m. Program, with motion pictures, at Wenonah Hotel.

The physicians of the Bay County area were dinner guests of the General Motors Corporation. Four other Regional Industrial Conferences, similar to the Bay City meeting, are being arranged by the MSMS Industrial Health Committee, for Flint, Grand Rapids, Lansing, Pontiac and Saginaw.

* * *

Baby cereal of a century ago was simply stale bread lightly boiled in water, wine or beer. Butter or sugar might be added but the use of milk was regarded as fraught with danger—milk might bring on the watery gripes, or the infant might imbibe with the milk the evil passions and frisky habits of the animal supplying the milk!

The Collection of Pediatric Antiques, now on an annual pilgrimage to colleges, hospitals, museums, libraries and other institutions of learning, is of considerable historical importance, depicting the progression of infants' feeding vessels and habits from the Greece of twenty-five centuries ago down to time within our own memory. The collection has been developed by Mead Johnson & Company of Evansville, Indiana.

* * *

Michigan Speakers on the Scientific Program of the American Medical Association session held in San Francisco in July included: J. D. Adcock, M.D., Ann Arbor; C. C. Birkelo, M.D., Detroit; Malcolm Block, M.D., Ann Arbor; F. A. Coller, M.D., Ann Arbor; J. W. Conn, M.D., Ann Arbor; A. C. Curtis, M.D., Ann Arbor; H. F. Falls, M.D., Ann Arbor; E. S. Gurdjian, M. D., Detroit; F. W. Hartman, M.D., Detroit; F. J. Hodges, M.D., Ann Arbor; J. F. Holt, M.D., Ann Arbor; D. H. Kaump, M.D., Detroit; R. M. Nesbit, M.D., Ann Arbor; J. K. Ormond, M.D., Detroit; H. M. Pollard, M.D., Ann Arbor; R. K. Ratliff, M.D., Ann Arbor; C. C. Sturgis, M.D., Ann Arbor; R. W. Waggoner, M.D., Ann Arbor; J. E. Webster, M.D., Detroit; and W. W. Zuelzer, M.D., Detroit.

* * *

Altmeyer Testimony on S. 1606 (April 4,1946):

Senator Donnell: Do you mind telling us, Mr. Altmeyer, who is the actual author of S. 1606, I mean to say who actually prepared it, if you know?

Mr. Altmeyer: I think it is a product of many minds that were put to work at the request of the authors of the bill.

Senator Donnell: Was Mr. Falk, Isadore Falk, one of the gentlemen who participated in it?

Mr. Altmeyer: Yes, sir, he is director of our bureau of research and statistics.

Senator Donnell: Did he do the bulk of the work in the preparation of S. 1606?

Mr. Altmeyer: I would not say he did the bulk of

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the work, he did a major or considerable part of it in co-operation with the United States Public Health Service.

* * *

A meeting of the Ninth Council or District and the eastern half of the Tenth Councilor District was held at Traverse City on May 29, under the co-chairmanship of Councilors E. F. Sladek, M.D., Traverse City, and F. H. Drummond, M.D., Kawkawlin.

MSMS President R. S. Morrish, M.D., of Flint, spoke on "Medical Economics."

MSMS Secretary L. Fernald Foster, M.D., of Bay City, discussed "Medical Public Relations."

L. Gordon Goodrich, Detroit, Assistant Director of Michigan Medical Service, outlined "The Veterans Administration Home Town Medical Care Program in Michigan."

Carleton Dean, M.D., Lansing, Director of the Michigan Crippled Children Commission, explained "The Rheumatic Fever Control Program of Michigan."

Wm. J. Burns, Lansing, MSMS Executive Secretary, presented the "Fourteen Firsts of the Michigan Medical Profession."

Sixty members in the two Councilor Districts were present, including Past President C. R. Keyport, M.D., of Grayling and MSMS Public Relations Counsel H. W. Brenneman.

* * *

Internationally known speaker at College of Surgeons Assembly in Detroit: Mr. Hamilton Bailey of London, England, will visit Detroit in October to deliver an address at the Eleventh Assembly of the United States Chapter, International College of Surgeons. His subject will be "Impending Death Under Anesthesia."

Among the eminent speakers and clinicians who will appear at the I.C. of S. clinics, and the Assembly to be held in Detroit's Masonic Temple, October 21-22-23, the following are noted: Dr. Albert Jirasek of Prague; Dr. Francisco Grana of Lima, Peru; Dr. Felipe Carranza of Buenos Aires; Dr. W. Wayne Babcock of Philadelphia; Dr. Wm. G. McCarthy, Jr., and Stuart W. Harrington, Rochester, Minn.; Dr. R. W. McNealy, Chicago; Dr. Richard Overholt, Boston; Dr. Edwin L. Zander, New Orleans; Dr. Albert A. Berg and Dr. Rudolph Nissen of New York; Dr. Max Thorek, Chicago; Dr. H. E. Billig, Los Angeles, and others.

Copy of program and detailed information, including housing arrangements, may be obtained by writing Dr. L. J. Gariepy, Secretary, 16401 Grand River Avenue, Detroit 27, Michigan.

* * *

The Michigan Pathological Society will meet in Detroit on the occasion of the Annual Session of the Michigan State Medical Society.

The pathologists have arranged a program for Thursday, September 26, at the Statler Hotel, beginning at 3:00 p.m. and ending at 11:00 p.m. An informal seminar on "Diseases of the Breast" will be led by C. F. Geschickter, M.D., of Baltimore.

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Dinner will be served at the Statler at 6:30 p.m. and the pathologists will have their final meeting at 7:30 p.m. at the Hotel.

A. L. Amolsch, M.D., of Detroit, is President; S. E. Gould, M.D., of Eloise, is President-Elect; and D. H. Kaump, M.D., of Detroit, is Secretary-Treasurer of the Michigan Pathological Society.

All MSMS members are invited to attend the sessions of the Michigan Pathological Society.

* * *

The News Letter of the AMA Council on Medical Service and Public Relations contained this interesting paragraph, describing the hearings on the Wagner-Murray-Dingell Bill in Washington:

"The Chairman of the National Commission on Children and Youth testified for the bill. Sounds like a big nation-wide group. But here is what questioning brought out: The Commission consists of a group of people appointed by Miss Lenroot and Dr. Martha M. Eliot of the U. S. Children's Bureau.

"Your patients should know about these tie-ups."

It is interesting to note that the Michigan State Medical Society had a difficult time sending its representatives to appear at the Washington hearing on S. 1606—Senator Murray claiming that the hearings were limited to "national groups."

It is further interesting to note that, following Michigan's representatives at the hearing, a lone doctor of medicine from Bad Axe, Michigan, who represented no national group, was invited to testify in behalf of the bill by Chairman Murray who previously had ruled that only "national groups" could be heard!

* * *

Doctors of medicine throughout Michigan are urged to interest young women of their own families and of their patients' families in investigating nursing as a career.

The need for nurses continues to be critical according to Miss Kathleen Young, R.N., President of the Michigan State Nurses Association.

"At least 1,000 girls must enroll in our schools of nursing this September if the minimum requirements for nursing care are to be met," she said.

She pointed out that many young women eligible to become student nurses do not know that nurses' salaries have been increased during the past few years and that opportunities for advancement and specialization in the nursing field are almost unlimited.

Information regarding the schools of nursing in the state is available from the Michigan Council on Community Nursing, 51 West Warren, Detroit 1.

* * *

"*Good business* is business free from government meddling. Today nearly every state has within its borders more federal employes living in that state alone, than the state itself employs to run its own government. The Federal Government has become a colossal montrosity.

"Other duties of Federal Government such as defense and stability are being neglected to keep alive a horde of almost 3,000,000 bureaucrats scheming to further restrict business and direct the people in all their activities."—Roy Hatten, Jackson, Mich., President, National Cemetery Association.

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ANNUAL SUMMER CLINICAL MEETING

S. D. Munson Hospital—Traverse City, July 25, 26, 1946

Thursday, July 25

Medical, Surgical, Orthopedic, Genito-urinary clinics
Plus formal papers and discussions by Dr. Frederick Coller and associates
Evening: Banquet at the Traverse City Country Club

Friday, July 26

Surgical operative clinics
Medical clinics

Members are invited. Make reservations through R. T. Lossman, secretary. Grand Traverse-Leelanau-Benzie County Medical Society, Traverse City.

* * *

NARCOTIC LAW DEFINED

It shall be unlawful for anyone to sell narcotic drugs except pursuant to a written order on a form furnished in blank for that purpose by the Commissioner of Internal Revenue. To this general prohibition there are certain exceptions: one being that a duly registered physician, dentist, or veterinary surgeon may administer or dispense narcotic drugs in the course of his professional practice and for legitimate medical needs. Another exception is that a pharmacist may sell narcotic drugs to a consumer under and in pursuance of a written prescription issued by a physician, dentist, or veterinary surgeon registered under the Federal narcotic law for legitimate medical needs, provided that such prescription SHALL BE DATED AS OF THE DAY ON WHICH SIGNED. A VALID PRESCRIPTION ALSO MUST BE WRITTEN IN INK, OR INDELIBLE PENCIL, MUST SHOW THE PATIENT'S NAME AND ADDRESS AND THE NAME, ADDRESS AND REGISTRY NUMBER OF THE PRACTITIONER. NOWHERE DOES THE LAW PROVIDE FOR THE SALE OF NARCOTIC DRUGS BY A PHARMACIST PURSUANT TO AN ORDER TELEPHONED BY A PHYSICIAN.

When a physician telephones a druggist and says: "Send twenty quarter-grain morphine sulphate tablets to Mrs. Smith and I'll give you a prescription later," the physician is asking the pharmacist to violate the law. The pharmacist may not lawfully comply with the physician's request. If a pharmacist persists in filling such telephone requests, he may find himself charged with a violation of the Federal narcotic law. THE PHYSICIAN MIGHT ALSO FIND HIMSELF CHARGED WITH AIDING AND ABETTING SUCH VIOLATION. The Bureau of Narcotics has recognized, however, that there may be instances of extreme emergency when, in order to expedite the delivery of such narcotics, the physician may wish to telephone the prescription in order that it may be ready when called for or may wish to have the drugs delivered to the patient. But even in these instances, THE PRESCRIPTION MUST BE HANDED TO THE DRUGGIST OR HIS MESSENGER AT THE TIME OF THE DELIVERY OF THE DRUGS.

—From *Detroit Medical News*, April 29, 1946.

THE DOCTOR'S LIBRARY

Acknowledgement of all books received will be made in this column and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.

CLINICAL ELECTROCARDIOGRAPHY. By David Scherf, M.D., F.A.C.P., Associate Professor of Medicine, New York Medical College, New York Flower and Fifth Avenue Hospitals, New York, and Linn J. Boyd, M.D., F.A.C.P., Professor of Medicine, New York Medical College, New York Flower and Fifth Avenue Hospitals, New York. New American Edition. 409 illustrations in 243 figures. Philadelphia: J. B. Lippincott Company, 1946. Price, $8.00.

This book is a completely revised and rewritten previous English edition on the practical use of electrocardiography met daily in the diagnosis of heart conditions. The essential features of electrocardiography are presented, interpretation of tracings is taken up in detail, abundant clinical and therapeutic material is introduced, and many controversial hypotheses are presented for their face values. All this coupled with ample and excellent illustrations, makes this book of marked value to both the inexperienced and the expert in the vital science of electrocardiography. The extensive bibliography at end of each chapter, the large type printing and ease of reading makes this publication a valuable addition to the library on this subject.

REHABILITATION, ITS PRINCIPLES AND PRACTICE. By John Eisele Davis, M.S., Sc.D., Veterans Administration Facility, Perry Point, Maryland. Revised and Enlarged Edition. New York: A. S. Barnes and Company, Inc., 1946. Price, $3.00.

This book is introduced by a study of the effects of war and depression. Tables are given of the numbers who engaged in war efforts in 1940, 1942 and 1943. Men and women are separated. Government employes increased from 4,300,000 in 1940 to 5,900,000 in 1943. The armed forces increased from 600,000 men in 1940 to 9,000,000 men and 300,000 women. War industry from 1,300,000 to 20,800,000. This upset the natural level and influenced the problem of rehabilitation. The psychiatric approach is studied, also the psychological approach. A chapter is given on the interest and effort theories of reconstruction. Nervous, mental and physical reconstruction is given prominency. Modern methods of practice with illustrative cases, and the use of handicrafts, education and art. The book is written for physicians, social workers, and the families of the mentally handicapped.

CLINICAL APPLICATION OF THE RORSCHACH TEST. By Ruth Bochner, M.A., Psychologist, formerly Bellevue Hospital Psychiatric Hospital, and Florence Halpern, M.A., Psychologist, Bellevue Psychiatric Hospital, New York. Second Edition, Revised and enlarged. New York: Grune & Stratton, 1945. Price, $4.00.

Most of the Rorschach literature up to the present time is to be found in a wide variety of professional journals. The integration and digestion of this material are now proceeding apace, and the trend is to render the results into such a concise and understandable form as to be useful to those interested in social and clinical dynamics. This book is one of the latest in the field of projective technics, and is to be considered a part of this integrative processing. In a specific sense, it consti-

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tutes a manual of Rorschach procedures and operations, and affords a practical overview of the interpretative values of the test in clinical situations.

Now in its second edition, the text has been revised and expanded, and contains an additional set of records from the files of Bellevue Psychiatric Hospital. A wide range of clinical material is covered—organic brain disorders, alcoholics, and behavior problems, as well as the regular run of mental defectives, neurotics, and schizophrenics. As a balance to these aberrant types, a group of "normal adult" and children's records are evaluated. Interpretations as a whole are short and to the point, to a degree at times that would likely strain the beginner's comprehension of the developmental Rorschach sequences so essential to limning out the personality pattern.

Bibliographical listings are brought up to the spring of 1945.

SHOCK TREATMENTS AND OTHER SOMATIC PROCEDURES IN PSYCHIATRY. By Lothar B. Kalinowsky, M.D., Research Associate in Psychiatry, College of Physicians and Surgeons, Columbia University, and Paul H. Koch, M.D., Assistant Clinical Psychiatrist, New York State Psychiatric Institute and Hospital. Foreword by Nolan D. C. Lewis, M.D., Professor of Psychiatry, College of Physicians and Surgeons, Columbia University. New York: Grune & Stratton, 1946. Price, $4.50.

"Psychiatrical as well as physical diseases are due to natural causes, which lend themselves to studies by certain techniques." This is born out by increasing knowledge of diagnosis and treatment. Shock treatments have been used all over the world for more than ten years.

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INDEX OF ADVERTISERS

In the distressing disturbances of the menopause, both natural and surgical, administration of the pure, crystalline estrogen **THEELIN** effectively "tides the patient over" this transitional period until endocrine readjustment occurs. It is also indicated in disorders due to estrogenic deficiency, such as vaginitis, kraurosis and pruritus vulvae.

Theelol Kapseals are available for treatment of the milder menopausal symptoms and for maintenance between injections. Theelin Suppositories, Vaginal, are particularly well adapted for the treatment of gonorrheal vaginitis.

THEELIN

Theelin in Oil is available in ampoules of 0.1, 0.2, 0.5 and 1.0 mg., in boxes of 6 and 50. Theelin, Aqueous Suspension, in 2 mg. ampoules, in boxes of 6 and 25. Theelol Kapseals, 0.24 mg., in bottles of 20, 100 and 250. Theelin Suppositories, Vaginal, 0.2 mg., in boxes of 6 and 50.

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THE JOURNAL

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1. Comroe, B. I.: Arthritis and Allied Conditions, Philadelphia, Lea & Febiger, 1944, p. 419.

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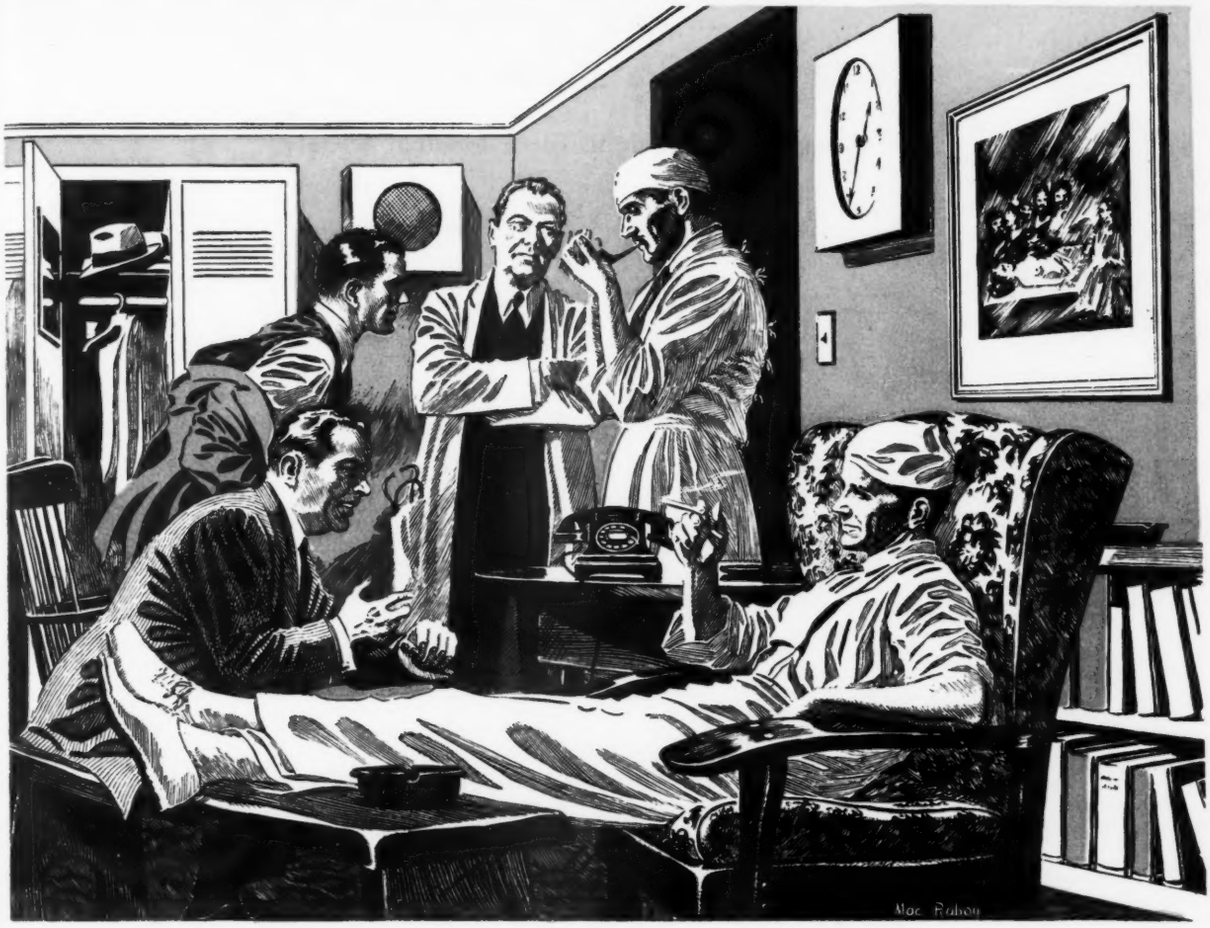

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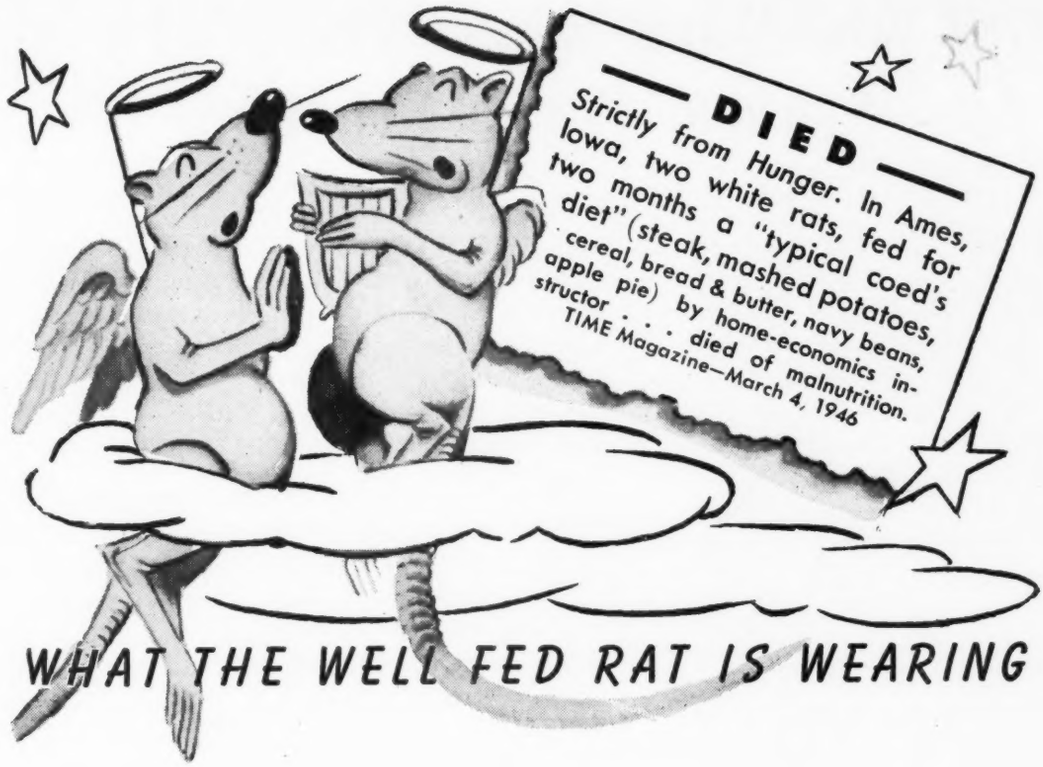

Halos and wings—they're the latest things for these two little rats, who stuffed themselves for two months on "a typical co-ed's diet . . . and died of malnutrition."

Although science may take this conclusion with a grain of salt, certain it is that many of your patients do exist on a "typical co-ed diet."

With orange juice sky-high and going higher, few of them get anything like their optimal requirements of vitamin C. Yet for a fraction of the cost of orange juice,* Doctor, your patients can get vitamin C protection with SODASCORBATE (sodium ascorbate).

SODASCORBATE Tablets are not only much less expensive than orange juice, but offer distinct advantages to your patients who are unable to tolerate ordinary vitamin C. The only sodium ascorbate in dry, neutral form, SODASCORBATE permits full and frequent doses of vitamin C without the gastric irritation, acid-shift or other undesired after-effects that so often result from large doses of straight ascorbic acid.

The average dose for adults is one tablet t.i.d.; or as indicated by the condition. For children under 12, one-half tablet. For babies or very young children, ¼ to ½ tablet may be crushed and dissolved in milk.

Supplied in bottles of 40 and 100 tablets, as well as in "hospital-size" bottle of 500 tablets. Mail the coupon for professional samples and covering literature.

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*An 8-oz. glass of orange juice (75 to 100 mg. vitamin C) costs 12c to 17c prepared at home—20c to 40c at public counters. One SODASCORBATE Tablet (equal in vitamin C activity to 100 mg. of ascorbic acid) costs ¼th or 1/5th as much—or 3½c.

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☐ Professional sample of SODASCORBATE.
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PHYSICIAN

PHYSICIAN'S EMBLEM

DOCTOR: A new physician's emblem for the windshield of your new automobile. Yours free for the asking.

The Who-What-When-Where-Why of Medical Public Relations

Breaking the trail is hard work but it "pays off" in returns, immediate and in the future. As usual, just a little ahead of the pack, the Michigan State Medical Society started an augmented public relations program in January and is currently in the position of being consulted by other state societies on the Who, What, When, Where and Why of modern medical public relations.

It is gratifying to note that the AMA adopted a plan, at its recent annual session in San Francisco, to place its important and vast public relations efforts in the hands of a highly trained Public Relations Counsel. It is regrettable this was not inaugurated ten years previously.

The MSMS Public Relations program is well under way. Here are some of the indications:

1. Newspaper advertisements prepared by the MSMS and sponsored by county societies, individual doctors and interested businessmen are appearing in eighty of the major daily and weekly newspapers of the state. Seven in the series of twelve have appeared. Made up for a bi-weekly schedule, some societies have run them on consecutive weeks either repeating the ads or preparing additional ads with the help of local newspaper advertising managers.

2. The pamphlet program is off to a start with 200,000 copies of the first two of the "Little Joe Genius" pamphlet series already distributed, and pamphlet No. 3 is on the way. A total of 80,000 copies of the pamphlet "You Have a Choice" has been prepared in co-operation with the Michigan Health Council (their assistance in newspaper layouts has been invaluable) and are being distributed through doctors' offices. A big hand is due those doctors who have added weight to the pamphlet program by personally dispensing pamphlets in their office and to their friends and acquaintances.

3. The MSMS radio program "American Medicine" vacationed for the summer from its once a week schedule over the Michigan Radio Network and supplementary stations (fifteen stations in all). Coverage of the thirteen-week series was the widest obtained in Michigan by a single advertiser.

4. M.D.'s are currently congratulating the Woman's Auxiliary of many county societies and the state society for their most valuable assistance in distributing leaflets. The *Auxiliary News* carried material on the WMD bill and more than one lady is carrying the clipping about in her purse to refer to for ammunition when the opportunity arises.

5. The debate subject for high schools next year is "Resolved: That the Federal Government should provide a system of complete medical care available to all citizens at public expense." A great big bundle of material brought the thanks of Edith Thomas, chief extension librarian of the University of Michigan, who gathers the material from which the young debaters extract arguments and facts. She'll receive more too. The school debaters have a big, impressionable audience.

6. Covers for the speakers kits previously sent to the various members of the County Society Speakers' Bureaus have been mailed, and additional material will follow. Speakers who have represented their societies say that it's a thrill to talk on medical socio-economics because people are interested. Their efforts are exploding the myth that "the medical profession is divided on the question of government control."

The latest Gallup poll says that the average man likes the idea of medical insurance but is not definite on who should administer the program. John Q's choice may be determined later by a vote, but the direction of his nod will be *decided now* and *during the coming months.* The only wasted effort will be if its the usual "too little and too late."

ANTIBIOTICS

The future of antibiotics is certain. What the new developments are to be is questionable, but the possibilities are great and almost endless. Fleming himself does not believe that penicillin will be the only clinically important antibiotic or even the best. We have two agents, penicillin and streptomycin, which will control infections by most of the gram-positive and gram-negative infections for which there was little or no treatment ten years ago. As yet, the problems of the virus infections and the walled-in chronic infections are to be solved.—D. F. Marsh, Department of Pharmacy, West Virginia University; West Virginia M. J., 42: (April) 1946.

You and Your Business

AMERICAN BOARD OF OBSTETRICS AND GYNECOLOGY EXAMINATIONS

The next written examination (Part I) of the American Board of Obstetrics and Gynecology, Inc., will be held for all candidates in various cities of the United States and Canada on Friday, February 7, 1947 at 2:00 p.m. Candidates who successfully complete the Part I examination proceed automatically to the Part II examination held later in the year. All applications must be in the office of the secretary by November 1, 1946. Candidates in military service are requested to keep the secretary's office closely informed of changes in address.

A number of changes in Board regulations and requirements were put into effect at the last annual meeting of the Board held in Chicago, Illinois, May 5-11, 1946. Among these is the requirement that case records must now be forwarded to the secretary's office from thirty to sixty days after the candidate has received notice of his eligibility for admission to the examinations for certification. At this meeting the Board also ruled that it will not accept the nine months residency as an academic year toward years of training requirements, following the termination of the official period of intern and residency acceleration, April 1, 1946.

Applications are now being received for the 1947 examinations. Final examinations will be held in Pittsburgh, Pa., June 1-7, 1947. For further information and application blanks address:

Paul Titus, M.D., Secretary,
1015 Highland Building,
Pittsburgh 6, Pennsylvania.

"HOME-TOWN" PHARMACEUTICAL SERVICE FOR VETS

Contracts for the care of veterans with service-connected disabilities, allowing free choice of physician, have been effected in Michigan, Kansas, California, Washington, Oregon, and New Jersey. Similar contracts have been made with hospitals and hospital service organizations for hospital care of veterans.

In addition, thirty-one state pharmaceutical associations have accepted the plan whereby veterans may have prescriptions filled by their own pharmacists.

The Michigan Pharmaceutical Association is one of the state groups which has entered into an agreement with the Veterans Administration for pharmaceutical service to eligible veterans.

"Designated" or "fee basis" physicians, after authorization by Veterans Administration to treat an eligible veteran, may prescribe as indicated, and such prescriptions may be filled, without cost to the veteran, at any participating pharmacy in Michigan. Physicians may use their regular prescription blanks for this purpose. Whenever possible, physicians should indicate the veteran's "fee number" on the face of such prescription. Prescriptions must be dated the day written and such date must be within the period of authorization for treatment of the particular Veterans Administration beneficiary, according to Paul R. Hawley, M.D., Chief Medical Director of the Veterans Administration in a communication dated July 24.

BILL M.C.C.C. WITHIN SIXTY DAYS

One of the requirements of the Crippled and Afflicted Children Acts is that billing be received by the Commission within sixty days of the time the child leaves the hospital.

Many physicians have been leaving the billing of their medical services to the hospital, often disregarding whether or not the hospital has followed through and has adequately provided for the physician's fee for service.

In some instances, hospitals have failed to bill either for themselves or for physicians, within the sixty day limitation. In other cases, hospitals have sent in bills for hospital's care without providing a bill for the physician's services. These omissions have frequently resulted in the loss of fees to the physician, the hospital, or both.

As the result of the above facts, it is recommended that each physician—at the time of his regular billing on the first of each month—make out a bill in duplicate for the services he has rendered to afflicted or crippled children—one to be sent to the Michigan Crippled Children Commission, 458 Hollister Bldg., Lansing, and the other to be forwarded to the hospital. Such a procedure will protect the doctor of medicine against loss of his fee and will insure that he has complied with the statutory requirements.

2,398 MICHIGAN DOCTORS OF MEDICINE IN WORLD WAR II

The Bureau of Information of the American Medical Association reports that 2,398 physicians were in military service from the State of Michigan. Of this total 1,443 physicians were separated from service, as of July 1, 1946, and are now located in Michigan.

Nine-hundred fifty-five (955) physicians from Michigan are now on active duty: 689 with the Army and 266 with the Navy or the United States Public Health Service (as of July 1, 1946).

Little Joe Genius says:

The congressional bills of political medicine are certainly being tossed around. They start a hearing on one and as soon as opposition appears they stop hearings. Then they start on a like bill of a different number. The hope is that the opposition will get dizzy and go to sleep and miss one. So keep awake.

Political Medicine

MICHIGAN MEDICAL SERVICE

Statement of R. L. Novy, M.D., president of the Michigan Medical Service, before the Committee on Education and Labor, United States Senate:

The administration and operation of a medical care plan is much more complex than the operation of a hospital care plan because of the wide variety of services that must be covered and the number of persons (doctors of medicine) who must render individual services under the plan. A hospital care plan provides for relatively few services offered by relatively few institutions, whereas a medical care plan encompasses hundreds of services offered by thousands of individual doctors. The problem of the medical care plan is, therefore, that of gaining actuarial experience covering a wide range of services and of arranging for the participation of many doctors.

While it was not the first medical care plan sponsored by the medical profession, Michigan Medical Service happened to develop procedures which have made it the most successful of the 63 doctor-sponsored non-profit medical plans now in operation. The procedures developed in Michigan consequently have been accepted as a pattern for many other plans now operating or being organized.

Michigan Medical Service now has 853,151 subscribers and has paid $15,049,278.94 to doctors for services provided in 317,147 cases (as of April 30, 1946). One of every six residents of Michigan is protected by the plan and the growth in number of subscribers last year alone amounted to 140,815 persons. It is expected that Michigan Medical Service will protect a great majority of the people of Michigan within the next few years.

The existence of Michigan Medical Service provided a convenient means for meeting the needs of veterans with service-connected disabilities. In Michigan thousands of such veterans have been permitted to go to their own physicians rather than to a veterans' facility for examination or treatments. Michigan Medical Service pays the doctors for these cases just as it makes payment for services provided to regular subscribers and, in turn, is reimbursed by the Veterans Administration. Not only has this system helped relieve the great pressure on the veterans' facilities, but it also has made it much easier for many veterans to receive needed care.

In addition, Michigan Medical Service is now experimenting with measures which would give relief recipients and welfare clients the same sort of personal service as that being provided to Michigan Medical Service subscribers and to veterans.

Michigan Medical Service is the outgrowth of studies begun early in the 1930's by the Michigan State Medical Society and by various County Medical Societies in Michigan. The studies included an examination of the British Panel System by representatives sent to England for that purpose. It was necessary to secure enabling legislation in Michigan, however, before the program could be put into operation. This legislation was passed during 1939 and Michigan Medical Service began operation on March 1, 1940.

It first offered a complete medical care program, covering medical services rendered in the patient's home, the doctor's office and the hospital. The objective of the doctors of Michigan, in other words, was to provide a medical care program that was complete in every respect.

In the absence of actuarial data, the rate of this complete medical care program was set at $4.50 a month for a full family—a figure which proved to be barely half the actual cost of providing service to the average family. In spite of this half-cost figure, the program attracted only negligible public interest. There developed almost immediately a considerable public pressure for protection against the costs of only major illness, and in response to this pressure, Michigan Medical Service developed a program providing for surgical care in hospital cases. In twenty-seven months, more than 350,000 persons were enrolled for this limited or surgical protection. During the same period of time, the maximum number enrolled under the complete medical care program was only 7,375 persons. Because of lack of public interest, the complete medical care program was discontinued in June, 1942.

It is, however, still the intention of Michigan Medical Service to broaden coverage as rapidly as there is evidence of adequate public interest. In order to determine public interest, a survey utilizing scientific sampling methods and involving personal interviews with nearly 5,000 persons throughout Michigan was undertaken during June and July of 1944. The survey showed that the people had definite interest in a program providing for medical care as well as surgical care in hospital cases, and Michigan Medical Service consequently has developed added protection of this type. The survey also showed that the residents of Michigan still were not interested in a program covering doctor's services in his office and in the patient's home.

Some of the hazards incident to the introduction of a medical prepayment plan are shown in the early experience of Michigan Medical Service. Today, as at the time that Michigan Medical Service was initiated, there still are no sound actuarial data to give a reasonably accurate indication of the costs of such a plan.

Michigan's complete medical care program was offered, as has been shown, at barely half cost and was discontinued because of lack of public interest. Rates for the surgical care program were established to cover twice the amount of surgery that is normally required by the Michigan population. At one time, however, the amount of surgery required by Michigan Medical Service subscribers was nearly four times the normal requirement, and two upward rate adjustments consequently were necessary. The deficit experienced by Michigan Medi-

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MICHIGAN MEDICAL SERVICE

(Continued from Page 1014)

cal Service reached a maximum of $504,000 and imperiled the operation of the entire program until changes in rates and in procedures brought about liquidation of the deficit and the strong financial position which Michigan Medical Service enjoys today.

While it maintains a separate corporate identity, Michigan Medical Service has joined with Michigan Hospital Service, the Blue Cross Plan providing for hospital care, in the development of a joint health care program. Thus the subscriber enrolls simultaneously for hospital, surgical and medical care, makes single regular payments, and carries a single identification card which, upon display to the doctor and to the hospital admission clerk, procures service for the subscriber.

Thus far the great majority of subscribers to the Michigan program are employees in business and industrial establishments. Two years ago Michigan Medical Service and Michigan Hospital Service began experiments and research looking toward the opening of enrollment to every resident of the state who wishes this protection.

For the enrollment of farmers a very active program is under way. Nearly 400 farm groups already have been enrolled through Farm Bureaus, Granges, farmer co-operatives and the Farm Security Administration.

For the enrollment of the self-employed and others who do not belong to an eligible group, Michigan Medical Service and Michigan Hospital Service undertook last year a program of community enrollment through which interested persons in every part of the state periodically will be given the opportunity to obtain protection through these two organizations.

For persons who cannot afford to pay, Michigan Medical Service and Michigan Hospital Service are seeking a means of co-operating with the government whereby "wards of government" and the indigent will not be segregated to charity facilities but will be entitled to the same sort of service as any subscriber and, for all practical purposes, will be indistinguishable from subscribers paying their own way. The program providing for the care of veterans in service-connected cases offers a suggestion as to how this objective may be realized.

Michigan Medical Service and Michigan Hospital Service also are undertaking long-range planning and have joined with other health groups in the establishment of the Michigan Health Council which has co-ordination and planning as a primary function. This body has established five objectives as follows: (1) complete health pre-payment service for the self-supporting; (2) co-operation with government to furnish health care for those unable to pay; (3) improvement of health facilities and standards; (4) health education of the public; (5) national co-ordination of health activities.

Michigan is a single state and cannot speak for the balance of the nation. However, it is believed that the grass roots approach which is highly sensitive to public demand and local requirements has been fundamentally responsible for the development of the Michigan plan.

SENATOR PEPPER'S BILL ACTIVE

It was generally assumed there would be no action on S.1318 because an all-out effort was being made by the administration to enact S.1606. However, when it became evident that such enactment would be unlikely this year, Senator Pepper revived his bill S.1318 for himself and for Senators Walsh, Thomas of Utah, Hill, Chavez, Tunnell, Guffey, LaFollette, Aiken, and Morse. Hearings were held June 21 and 22. Telegrams were sent to selected persons who were asked to testify. Hearings lasted less than two hours on June 21 and all day on June 22. Most witnesses favored the objectives and the methods proposed. Little opposition was expressed by the hand-picked witnesses.

The Editor telegraphed Senator Pepper, as an individual, expressing his opposition to the bill, asking for copies of the testimony at the hearings and asking if medical societies in general had been given a fair chance to testify. Senator Pepper replied as follows:

WASHINGTON D. C. JULY 10. THANK YOU FOR INFORMING ME OF YOUR VIEWS ON MATERNAL AND CHILD WELFARE BILL. DOCTORS HOWARD AND WALL TESTIFIED ON BEHALF OF THE AMA AND STATEMENTS OF SOME MEDICAL SOCIETIES INCLUDED IN THE RECORD. MEDICAL SOCIETIES GIVEN FULL OPPORTUNITY TO TESTIFY ON MATERNAL AND CHILD HEALTH PROVISIONS OF S 1606 WHICH ARE SIMILAR TO S 1318. THIS TESTIMONY IS BEING CONSIDERED IN DELIBERATIONS ON S 1318. YOUR TELEGRAM BEING INCLUDED IN RECORD AND YOU WILL RECEIVE COPY OF TESTIMONY AS SOON AS PUBLISHED KINDLY FORWARD COMPLETE ADDRESS. BEST WISHES. CLAUDE PEPPER USS.

On July 8 there was an executive session of the full Committee on Education and Labor to report on this bill. Consideration was laid over until July 15, and there was danger that the bill might be reported favorably. There is great popular appeal in legislation providing services for mothers and children, particularly when it seems to operate on a grant-in-aid basis and seems to leave much autonomy to the States; and since this is an election year, legislation that would give "free" services to 46 million persons *would have great political value.*

What Is At Stake? S.1318 provides "free" medical services for some forty-three million children and three million mothers during the maternity period. All told, it would nationalize medicine for 40 per cent of the population. Senator Pepper conceded at the hearings the cost for medical care would be over two billion dollars a year from general revenues. Only the first five million would be matched by the States; the remaining cost would be met by the Federal Government through an open-end appropriation. The initial 100 million dollars is only a token appropriation to get the program started. If the federal government furnishes 98 per cent of the funds, the program will be federally controlled.

While the House might refuse to pass this legislation, *there is always the possibility* that some day this type of

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...the *"why"* of success with Ertron in arthritis

THERAPEUTICALLY EFFECTIVE

The findings of various investigators indicate that beneficial effects of Ertron are due to its systemic effect. The Ertronized patient first notices a distinct feeling of well-being. This is followed in a large proportion of patients by a recession of pain, diminution of soft-tissue swelling, increased mobility of the affected joints, improvement of function and resistance to fatigue. The arthritic is enabled to increase his daily activities or to better withstand the surgical procedures of orthopedic restoration.

CHEMICALLY UNIQUE

Laboratory studies over a five-year period prove that Ertron—Steroid Complex, Whittier—contains a number of hitherto unrecognized factors which are members of the steroid group. The isolation and identification of these substances in pure form establish the chemical uniqueness of Ertron and its steroid complex characteristics. Each capsule of Ertron contains 5 milligrams of activation-products—biologically standardized to an antirachitic activity of fifty thousand U.S.P. Units.

Physician control of the arthritic patient is essential for optimum results. Ertron is available only upon the prescription of a physician.

Supplied in bottles of 50, 100 and 500 capsules. Parenteral for supplementary intramuscular injection

ETHICALLY PROMOTED

Ertron is the registered trademark of Nutrition Research Laboratories

War Medicine

ONLY NINE TICK-BORNE DISEASES REPORTED IN ARMY THIS YEAR

Only nine cases of tick-borne diseases, four of which were Rocky Mountain Spotted Fever, have been reported in the army since January. In a War Department announcement, Major General Norman T. Kirk, the Surgeon General, warned the peak of anticipated cases is expected during the hot months of July and August. After the first frost, ticks usually hibernate.

Credit for the low incidence of these diseases was due to personal caution practiced by soldiers and careful preventive measures of the Medical Department. Insect repellents, insecticides, and personal inspection are the main control measures employed in the army although vaccination againt Rocky Mountain Spotted Fever may be used for troops exposed to great danger of infection.

Of four cases of Rocky Mountain Spotted Fever, two were reported in O'Reilly General Hospital, Springfield, Missouri, and one each at Fort Bragg, North Carolina, and Camp Carson, Colorado. Other tick-transmitted diseases contracted were relapsing fever, "Bullis fever," Colorado tick fever and tularemia. The latter can also be contracted by handling various specie of wild game. Colorado tick fever was contracted by two soldiers while the others have occurred only once.

Close attention is devoted to this group of tick-borne diseases although military medicine is acutely aware that mosquitoes, flies, mites and lice are more deadly enemies of the military as well as civilian populations.

During 1941 there was one reported case of Rocky Mountain spotted fever in the army. In 1942 there were three, in 1943, thirty-eight, 1944, fifteen, and 1945, five. All-time high set in 1943 is attributed to the millions of troops on maneuvers in tick-infected areas throughout the United States.

Medical officers pointed out that only a small proportion of ticks in nature are infected and capable of transmitting a disease.

Army doctors continually stress that twice-daily inspections of persons in woody or grassy regions will virtually insure immunity from tick-borne disease. It takes the tick, which cannot fly, about six to eight hours to become firmly affixed to the body.

Tweezers, or some similar implement, are advised in removing ticks. In no instance, should they be removed by the naked hand. In the event they are crushed in the process infection may be transmitted to a person through a microscopic scratch in the fingers.

RADIO-ACTIVE URANIUM ISOTOPES OPEN UP UNEXPLORED PROCESSES OF LIVING

An "x-ray" of the dynamic processes of living now is available to medical research.

Possibility of obtaining for the first time relatively large amounts of radio-active isotopes through the uranium piles of the Manhattan District brings basic biological investigation to a new frontier, according to a statement by Major General Norman T. Kirk, Surgeon General of the army, whose office will co-operate in the distribution of the materials to army hospitals.

The Surgeon General said requests for these materials should come from accredited research groups or educational institutions and should be directed to Isotopes Branch, Research Division, Manhattan District, P. O. Box "E," Oak Ridge, Tennessee.

Isotopes as tools of medicine have been compared to the microscope and the x-ray. But these were useful largely for study of the organs of life whereas the isotopes open up the largely unexplored field of the processes of life. It is in this respect, rather than as actual remedies for anything, that the substances are of pre-eminent importance today.

Medical scientists would like to know more about how calcium and phosphorus are used in building teeth and in uniting fractures, how iodine is used by the thyroid gland, exactly what happens when one or more of the glands of internal secretion starts malfunctioning, how the process of wound healing is carried out.

Such questions and hundreds of others whose answers now are among the secrets of life wait upon radio-active isotopes for clarification. Elements such as calcium, phosphorus, sulphur, iron and a score of others can be "tagged" with small amounts of the isotopes and followed through the body through their emission of beta and gamma radiation. The latter is the same as x-radiation.

Some of these radio-active isotopes may find a place as specific "medicine," medical officers point out. The most notable example to date is radio-active phosphorus, known chemically as P32. Phosphorus is an important constituent of both bones and blood. It is carried in the blood stream through the entire body. When the radio-active isotope is administered the blood stream is subjected to a radium-like bombardment. Consequently when the isotope was produced first in the cyclotron about seven years ago there were high hopes that it might mark a long advance towards the conquest of leukemia—a cancer-like condition of the blood in which there is an enormous increase in white cells which, however, do not have the ability of ordinary cells of this sort to combat infection. Despite various complications and disappointments, use of P32 now is generally accepted as the treatment of choice for certain forms of leukemia. It brings about long remissions of the disease. It cannot be considered a "cure" for any leukemic condition in the present stage of the therapy but it is admittedly a long step in advance in the treatment of one of the most difficult maladies known to medical science.

The element iodine tends to concentrate in the thyroid gland. Since radio-active iodine behaves exactly the same as ordinary iodine in the body it was logical that it should be tried in malignant growth of the thyroid.

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RADIO-ACTIVE URANIUM ISOTOPES

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Results to date have been somwhat puzzling and inconclusive. The same is true of other radio-active isotopes which have been tested for specific therapy.

But this whole field of medicine still is almost unexplored and physicians naturally are proceeding with great caution until they know more about specific effects and possible complications. Even if all prospects for the therapeutic use of isotopes fail to materialize, the importance of a relatively abundant supply of these materials remains preeminent.

Any element—ninety-six now are known—is a combination of infinitesimally minute elementary particles. Those are protons, each carrying one charge of positive electricity; electrons, each carrying one charge of negative electricity; and neutrons, which are not electrically charged.

The nucleus of an atom is made up of protons, electrons and neutrons. Revolving around the nucleus somewhat as planets revolve around the sun, are electrons. There are precisely the same number of electrons revolving around the nucleus as there are protons in the nucleus which are not balanced by nuclear electrons. The number of outer electrons is the atomic number.

But there may be an extra neutron in the nucleus. It weighs precisely as much as a proton. It is electrically neutral. Hence, it does not leave room for an extra outer electron. The atomic number remains the same. Element ninety-two, which is uranium, remains uranium so long as there are ninety-two outer electrons. But with an extra neutron in the nucleus it weighs more. This heavier uranium is known as an isotope. Chemically it acts precisely the same as any other uranium.

For reasons not clearly understood various nuclear combinations are unable to stick together and break up with considerable violence. They then are radio-active, shooting out radiations which can be detected by means of various devices. Chief of these is the so-called Geiger counter. By means of it the presence of radio-active atoms anywhere in the body can be detected. For example, a person is given something containing radio-active copper, by mouth. The counter will enable a physicians to follow the course of this copper through the entire process of assimilation by the body.

STUDIES AT DUKE UNIVERSITY CAST NEW LIGHT ON FILTERABLE VIRUS

The filterable virus, probably man's most deadly enemy, is a highly complex structure.

New light on the nature of the almost infinitesimally minute things which are responsible for some of the most dreaded human and animal disease has been obtained from studies at Duke University, according to a report just made to the Office of the Surgeon General of the Army under whose direction experimental work was conducted during the war.

The viruses have diameters of only a few millionths of a millimeter. They are far below the limits of the most powerful optical microscope. Through use of the electron microscope and microchemical techniques, however, it was possible for the Duke investigators to obtain considerable information.

They are so minute that there has been some question as to whether they are actual living things, or large molecules somehow endowed with the ability to reproduce themselves.

But, says Dr. Joseph W. Beard, who was in charge of the Duke investigations under the Army: "These particles cannot be molecules. They are of very complex structure and apparently are enclosed in a membrane."

The studies were made on two viruses—one of which causes a disease of rabbits known as papilloma and the other the human malady vaccinia—and one of the bacteriophages, which are quite similar organizations. These were simpler to study than the influenza viruses which were the ultimate objectives of the Duke investigations. It was felt that any knowledge of viruses in general ultimately might prove of value.

The bacteriophage especially looked like an ultra-microscopic tadpole. It has a well-defined head and a stubby tail. The papilloma virus was spheroidal in shape while the vaccinia organism was like a flattened disk with denser internal material bulging beneath the surface of its "skin."

Other tests showed that these viruses were a little more than half water. The chemical composition of the bacteriophage consisted of a mixture of proteins and lipoids, or basic constituents of fats, in association with a high content of nucleic acids, very complex compounds found in the nuclei of all living cells. The Chief element was baron—about 42 per cent. There also were considerable amounts of nitrogen and phosphorus. The diameter of the papilloma virus was found to be about 65 thousandths of a millimeter.

The work has just been reported through the Army Epidemiological Board.

THREE YEARS OF JAPANESE IMPRISONMENT HAS LITTLE EFFECT ON MINDS OF AMERICAN SOLDIERS

Three years in Japanese prison camps, most of the time on starvation rations and subjected to frequent beatings, had surprisingly little effect on the minds of more than 4,000 American soldiers who survived the ordeal.

Wherever these men landed in the United States after liberation they were met by teams of medical specialists assigned from the Office of the Surgeon General. A report on the neuropsychiatric findings has just been made by Lieutenant Colonel Norman Q. Brill, who was in charge of this phase of the examinations.

Considerable importance was attached to early medical contact with the released soldiers because, says Dr. Brill, "never before in this country's history had such a large group been exposed to starvation, torture and humiliation." The psychiatrists were interested in the factors that were responsible for the survival of these men when so many of their comrades, in about the same phys-

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THREE YEARS OF JAPANESE IMPRISONMENT

(Continued from Page 1022)

ical condition when captured, had succumbed. The nearest they came to finding a common factor, however, was what is described in the report as a "tremendous will to live." Otherwise the soldiers differed in about every possible way.

"All of them," says Colonel Brill's report, "lived only for the day. Indeed when one of them would fail to concentrate on or begin to hoard food, or gave way to morbid thoughts concerning the seemingly hopeless situation, he was earmarked by his companions as quite likely to die shortly. A prisoner who would hoard his rice allowance for several meals in order to enjoy the sensation of one large meal was referred to as 'rice happy.' This was generally as indication of the beginning of deterioration and early demise.

"When those of lesser spiritual strength became ill they were likely to give up, quit eating entirely, and frequently would die within a few days. One fails to find a scientific reason or an adequate term to explain survival. It seemed to some of the examiners that 'courage' was the best word. It seemed that the only common factor among the survivors was that they had courage. They never stopped in their struggle for survival. They ate anything available, including cats, dogs, silkworms and other things repulsive to normal human beings. When struck with dysentery and malaria they would nevertheless attempt to carry on. This strength and courage had no connection with social background or education."

The men themselves, Colonel Brill said, expressed no concern about their ability to readjust to life in the United States. Regardless of the future, they felt, they would meet any situation likely to arise after living through the prison camp years.

TRANSURETHRAL PROSTATIC RESECTION ON ELDERLY PATIENTS

The mortality rate for all patients who undergo transurethral prostatic resection ranges from 1 to 2 per cent. For elderly patients the mortality rate is higher, but it is not more than 2 or 3 per cent.

Complications occur most frequently among the elderly patients, who accordingly require more careful medical care.

Carcinoma of the prostrate occurs more frequently as the age of the patient increases. At present, the treatment of choice in cases of carcinoma of the prostate is transurethral resection and postoperative hormonal therapy. Bilateral orchectomy is reserved for a special group of patients.—Thomas L. Pool, M.D., Minneapolis; Geriatrics, Vol. 1, No. 2, March-April, 1946.—*Ohio State Medical Journal*, May, 1946.

SENATOR PEPPER'S BILL ACTIVE

(Continued from Page 1016)

bill might get through both houses, especially in an election year, as an administration measure, and in the hectic days at the close of a session. It would be a long step toward state socialism. If this country is to go socialist, action should be based on popular referendum, not on legislation which slips through by default or because the people do not understand what is happening.

There is a major threat in the combination of politicians, bureaucrats, and labor leaders seeking self-perpetuation. A federal donation of "free" medical care to 40 per cent of the population exceeds by many fold the largesse of WPA.

Amendments to S.1318 (Pepper EMIC Bill)

With respect to methods of payment (Sec. 103 (a) (6) (C), p. 5, line 13, provision is made to include fee-for-service in addition to the presently specified payment "on a per capita, salary, per case, or per session basis." In the present bill the fee basis is specified only in the case of "consultations or emergency visits." However, *"professional personnel, groups, or institutions would not be permitted to accept supplemental payments from or on behalf of individuals receiving care."*

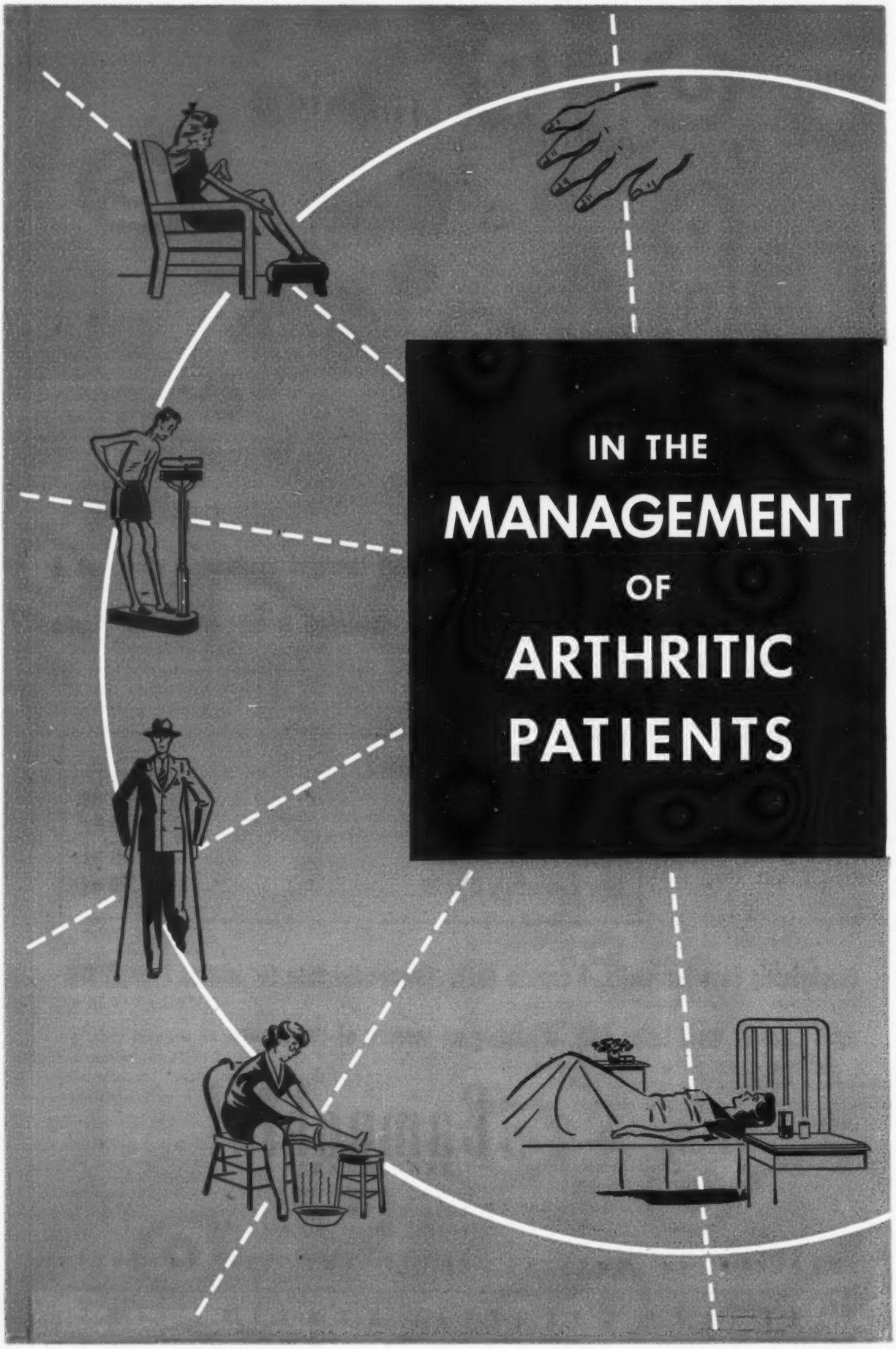
Thus, if a surgeon signed a government contract which set a $50 limit on charges for a specified operation, the surgeon could not collect any more than $50 regardless of his customary charge or of the financial ability of the patient. There would be created *a permanent medical OPA not on an emergency basis* but for all time. The area of private medical practice would be reduced to the vanishing point and the fees of superior practitioners would be forced to a low level little better than a Government salary.

"Wherever the terms 'medical,' 'physicians,' 'general practictioner,' 'hospital,' are used in the bill, they [are to] be expressly defined to include osteopathic practitioners and hospitals, and osteopathic representation on the National Advisory Committee under Titles I and II [is to] be provided for."

The bill if enacted would establish the principle that the federal government is to furnish medical care as a tax-supported public service for all persons in certain segments of the population *whether or not they are able to pay for such services themselves.* Doctors who cooperated with the EMIC program as a patriotic duty in wartime, providing services for wives and children of servicemen in the four lowest grades, may now be expected to conduct their entire practice under government auspices and controls in the future, insofar as services for mothers and children are concerned. For specialists in pediatrics this means practically no more private practice. For mothers and children it means services under government rules and regulations, enforced use of public clinics, regimentation, et cetera.

Little Joe Genius says:

We see where the UAW-CIO are adopting the business practices of management. Their funds are low, so Mr. Addes states: "About the only place we can make a sharp reduction is in the payroll."



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For such patients the easy digestibility and high nutritive value* of MULL-SOY make it an ideal milk substitute... by providing a rich source of all essential amino acids in the form of soy proteins, together with the other nutritional values of fat, carbohydrate and minerals in quantities closely resembling those of cow's milk when mixed in standard dilution (1:1).

*Cahill, W. M., Schroeder, L. J. and Smith, A. H.: Digestibility and biological value of soybean protein in whole soybeans, soybean flour, and soybean milk, J. Nutrition, 28:209, Sept. 1944.

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THE MALE CLIMACTERIC

"We urge the careful study of men from 50 to 65"

"The complete disappearance of manifestations in the male climacterium is so prompt following testosterone therapy that this response may be used as a simple therapeutic test to differentiate complaints of this nature from those of other causation." (Goldman and Markham: Jl. Clin. Endocrin., 2: 237, 1942.)

Perandren

(TESTOSTERONE PROPIONATE)

Perandren, pioneer brand of synthetic testosterone propionate offered to the American medical profession, is still unsurpassed in potency and in therapeutic effect.

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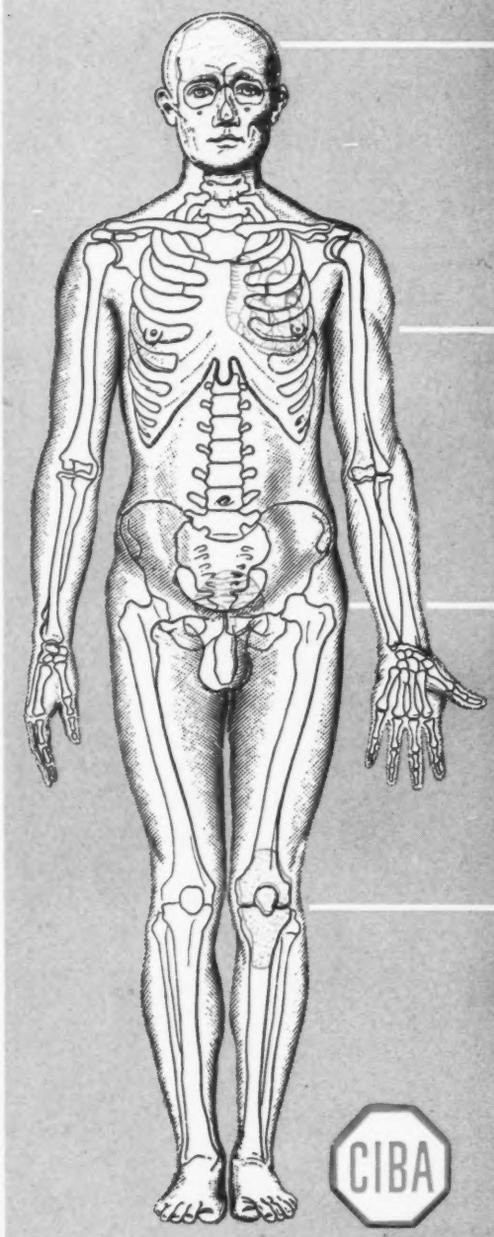
"THE SYMPTOMS OF THE CLIMACTERIUM MAY BE GENERAL..."[2]



PSYCHIC—Symptoms of the climacterium in the male may include general mental depression and inertia, nervousness, irritability and irascibility. Inability to concentrate and impaired memory are accompanied by a feeling of uncertainty.[2,3]

CARDIAC—Attacks of angina-like pain which are not necessarily related to effort or to the time of night or day, and which are not relieved by nitroglycerine, are a clinical feature by which the cardiac syndrome in the male climacterium may be recognized.[2]

GENITO-URINARY—Mild urinary symptoms, including loss of force of the urinary stream, terminal dribbling, vague lower abdominal distress, are commonly found. Decrease of libido and potency may or may not be an accompaniment of other symptoms.[2,3,4,5]

ARTHRALGIC AND MYALGIC—Symptoms include shifting neuralgic pains in the legs and arms, paresthesias of various parts of the body, varying from a feeling of numbness to lightning-like pain and distinguished by their fleeting nature and tendency to migrate.[2,3]

CIBA

Androgens promptly relieve climacteric symptoms

PERANDREN

The syndrome of the climacteric, with its multiplicity of symptoms, responds promptly to therapy with Perandren: chemically pure testosterone propionate in ampuls for injection. Administered in adequate quantity, Perandren usually brings about abatement of symptoms in a period of from 48 hours to three weeks. It is considered advisable to continue therapy for at least six weeks in the event that treatment is being instituted to clarify a doubtful diagnosis. Suggested dosage: 10-25 mg. two to three times weekly, depending upon the severity of symptoms and the patient's response to therapy.

METANDREN LINGUETS

Results clinically identical to those secured with Perandren may be obtained by therapy with Metandren Linguets: hard pressed wafers of methyltestosterone which are not swallowed but allowed to remain under the tongue or in the cheek until completely dissolved. According to Lisser and Curtis[6] "Methyl testosterone linguets in the form of hard pressed tablets for sublingual absorption, is to date, by far the most economical mode of administering androgens to hypogonad males." Many physicians find it advisable to begin therapy with injections of Perandren and to maintain the patient with Metandren Linguets. Maintenance dosage in the climacteric is usually one Linguet three times daily.

THE MALE HORMONE IN BREAST CARCINOMA

The use of testosterone propionate in carcinoma of the female breast has received much attention of late. It has been reported that in some cases dramatic relief of symptoms has been achieved with this type of therapy. Retardation of growth and even regression of the metastases appear to take place in some instances, although the ultimate outcome remains unaffected. Indications point to advisability of high dosages, regardless of virilization.

STEROID ANDROGENIC HORMONES FOR DURATION OF EFFECT WITH ECONOMY

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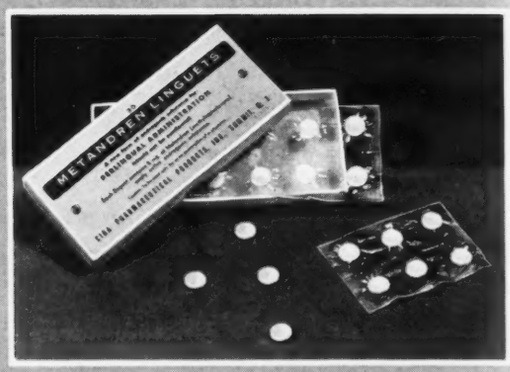

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REFERENCES: 1. Goldman, S. F., and Markham, J. J.: Jl. Clin. Endocrin., 2: 237, 1942. – 2. McGavack, T. H.: Jl. Clin. Endocrin., 3: 71, 1943. – 3. Douglas, R. J.: Jl. of Urol., 45: 404, 1941. – 4. Heller, C. G., and Myers, G. B.: Jl. Clin. Inv., 21: 622, 1942. – 5. Werner, A. A.: Urol., 49: 872, 1943. – 6. Lisser, H., and Curtis, L. E.: Jl. Clin. Endocrin., 3: 389, 1943.

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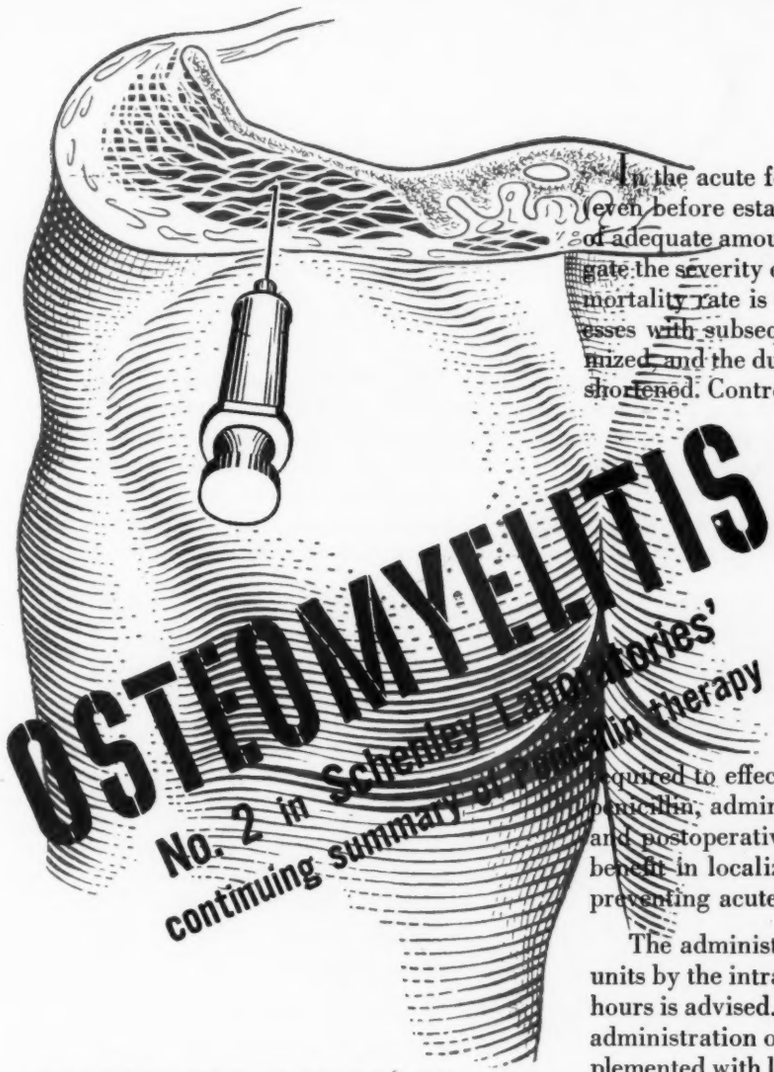

In the acute form, early administration (even before establishment of the diagnosis) of adequate amounts of penicillin will mitigate the severity of the infection. Hence, the mortality rate is reduced, destructive processes with subsequent deformity are minimized, and the duration of the disease is shortened. Control and eradication of the infection may be obtained without major surgical intervention; however, surgical removal of necrotic bone will be required in some instances and abscesses should be either aspirated or incised and drained.

In the chronic form, major surgery is usually required to effect a cure; however, penicillin, administered both preoperatively and postoperatively, is of inestimable benefit in localizing the infection and preventing acute exacerbations.

The administration of 20,000 to 40,000 units by the intramuscular route every 2 to 4 hours is advised. When necessary, parenteral administration of penicillin should be supplemented with local instillations of 25,000 to 50,000 units in a sterile solution two to three times daily. Due attention must be paid to surgical, supportive, and other measures when these are indicated.

To determine complete control and eradication of the infection, a prolonged follow-up period with frequent physical examinations and serial roentgenograms is advised.

KEEFER, C. S. *Penicillin—Its Present Status in the Treatment of Infections: The Nathan Hatfield Lecture XXIX, Am. J. Med. Sc. 210:147 (Aug.) 1945.*

ALTEMEIER, W. A.: *Treatment of Acute Hematogenous Osteomyelitis with Penicillin, Ohio State M. J. 42:489 (May) 1946.*

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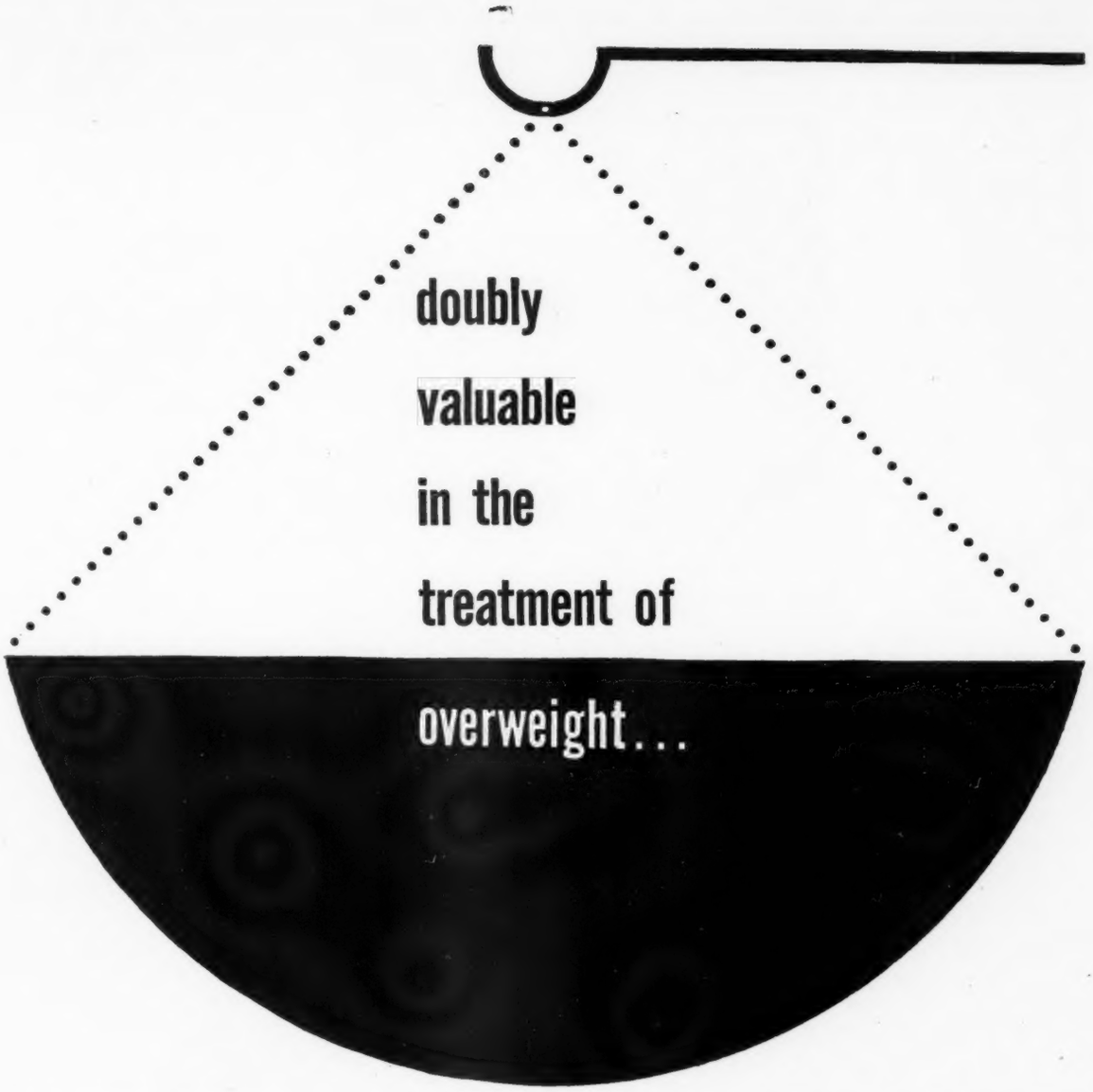

In a recent clinical study, Hawirko and Sprague* found that *Dexedrine* (*d*-amphetamine) exerts two beneficial actions in the treatment of overweight:

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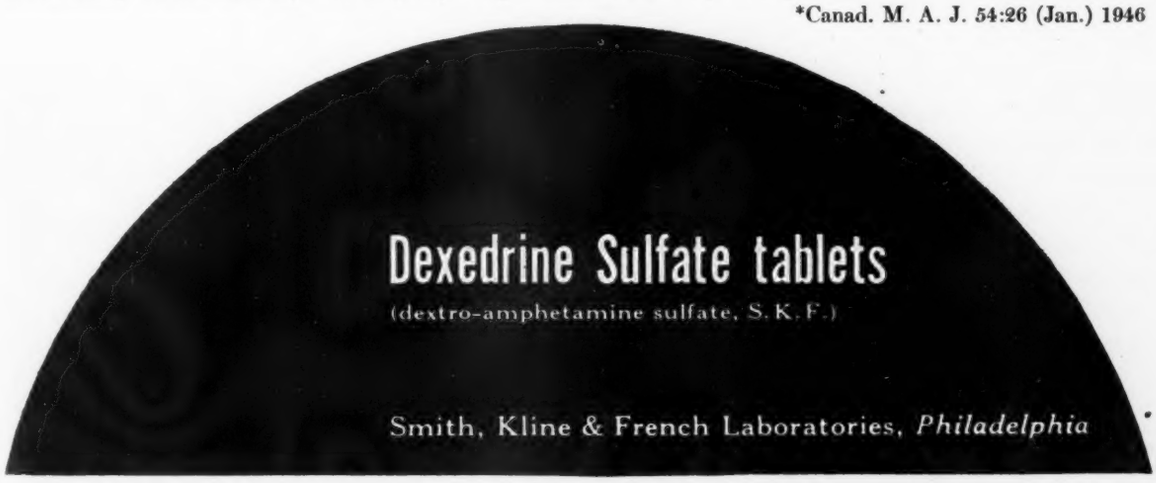
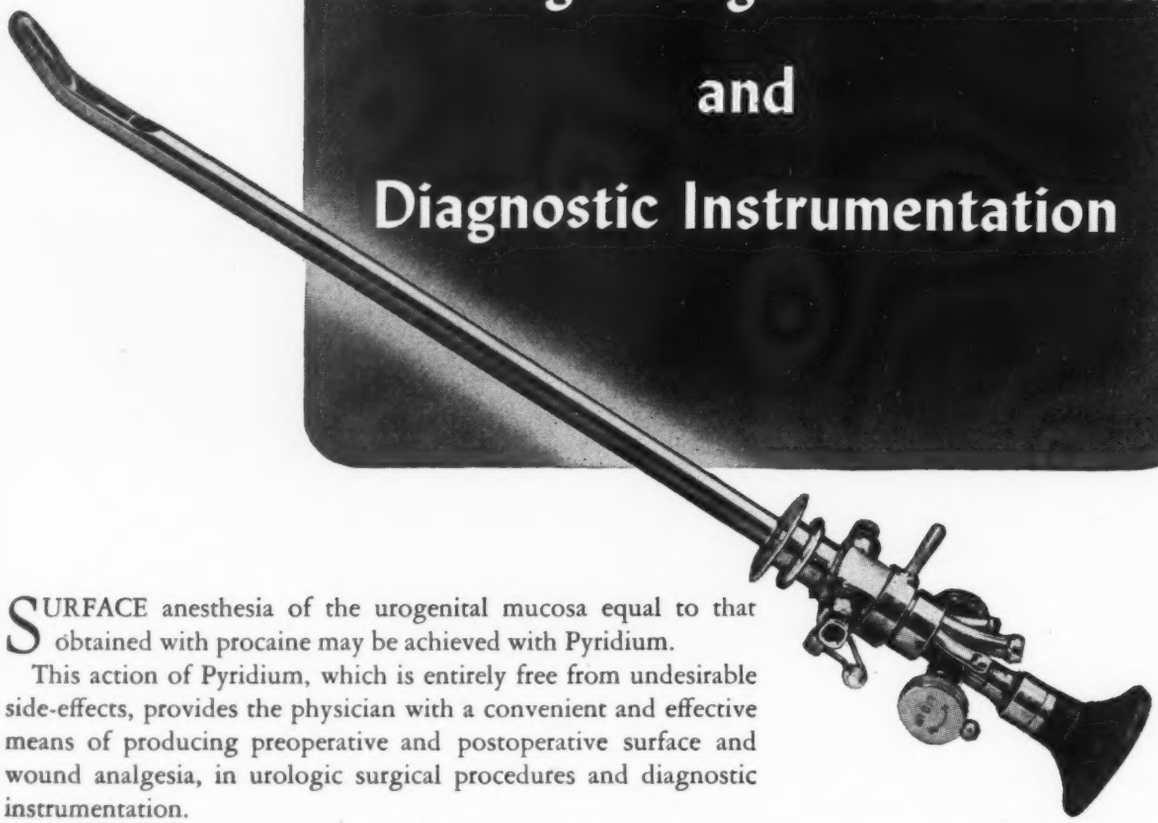
2. Its unique central nervous stimulant effect combats the feeling of "discouragement and irritability which usually accompanies rigid adherence to prolonged use of a low calorie diet".

*Canad. M. A. J. 54:26 (Jan.) 1946



Effective Urogenital Analgesia in Urologic Surgical Procedures and Diagnostic Instrumentation



SURFACE anesthesia of the urogenital mucosa equal to that obtained with procaine may be achieved with Pyridium.

This action of Pyridium, which is entirely free from undesirable side-effects, provides the physician with a convenient and effective means of producing preoperative and postoperative surface and wound analgesia, in urologic surgical procedures and diagnostic instrumentation.

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Pyridium imparts an orange-red color to the urine. It also temporarily stains the urogenital mucosa, which may at times make it more difficult to detect inflammatory and other changes.

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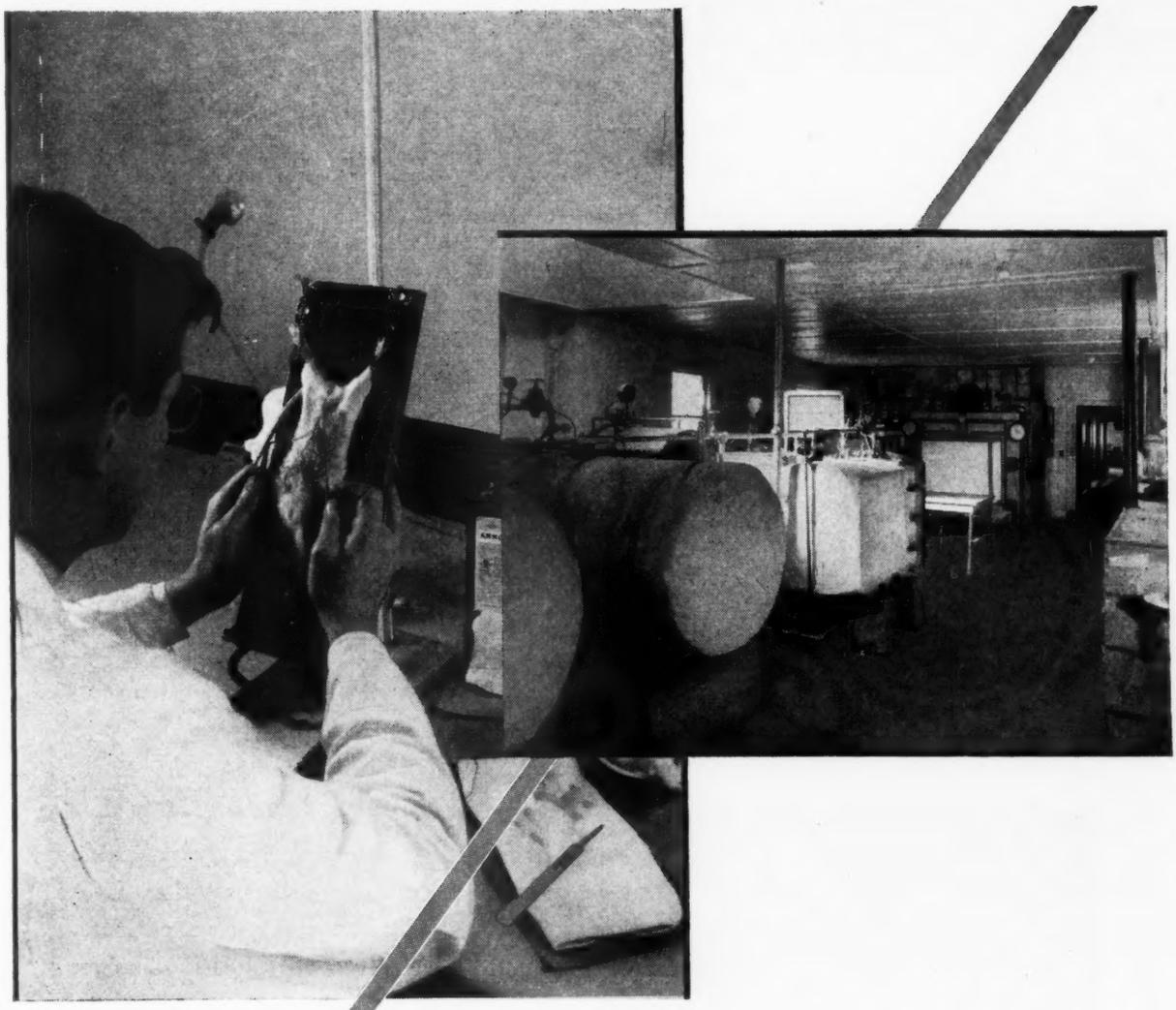

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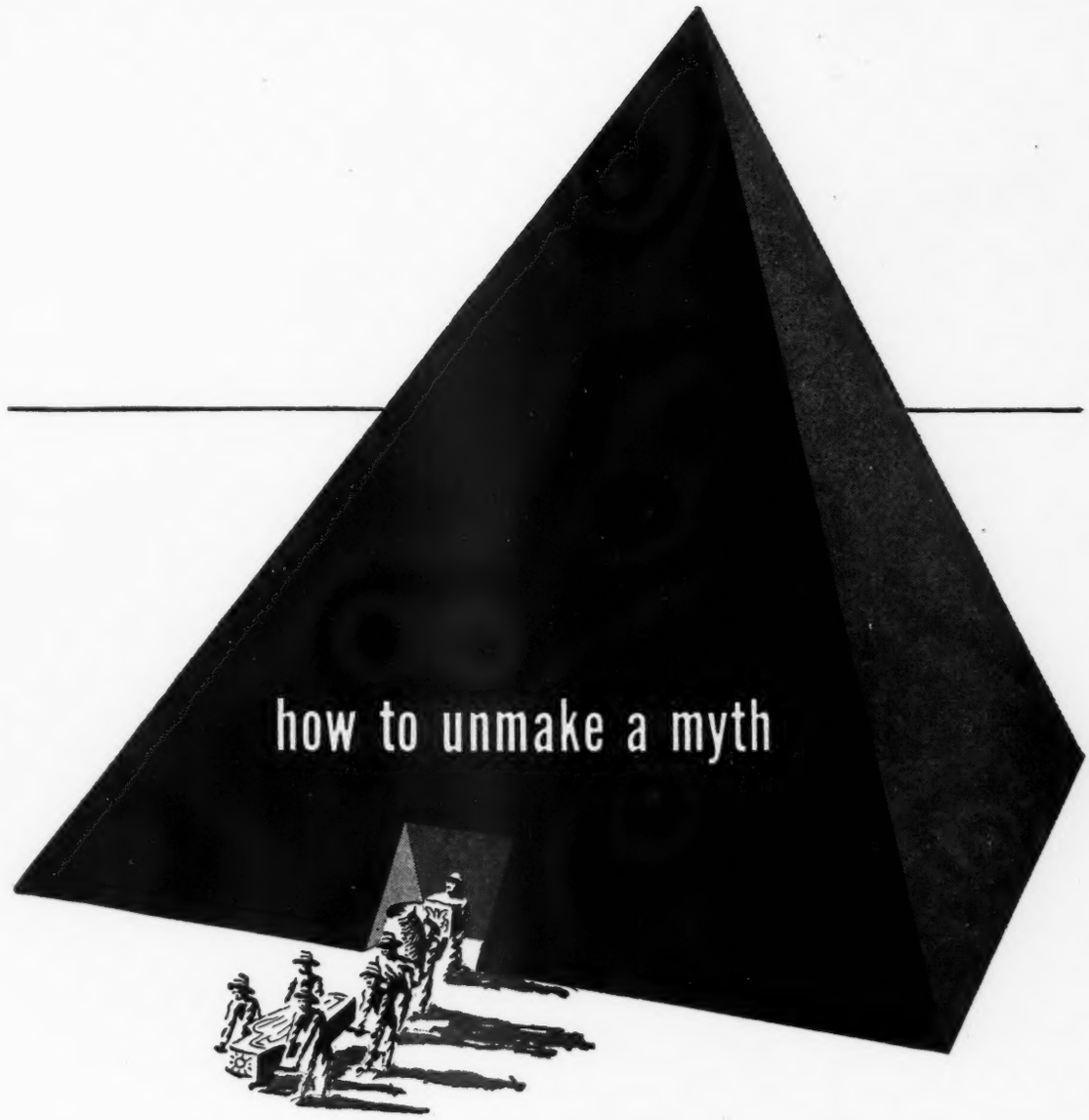

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1. Am. J. Dis. Child. 66:1 (July) 1943

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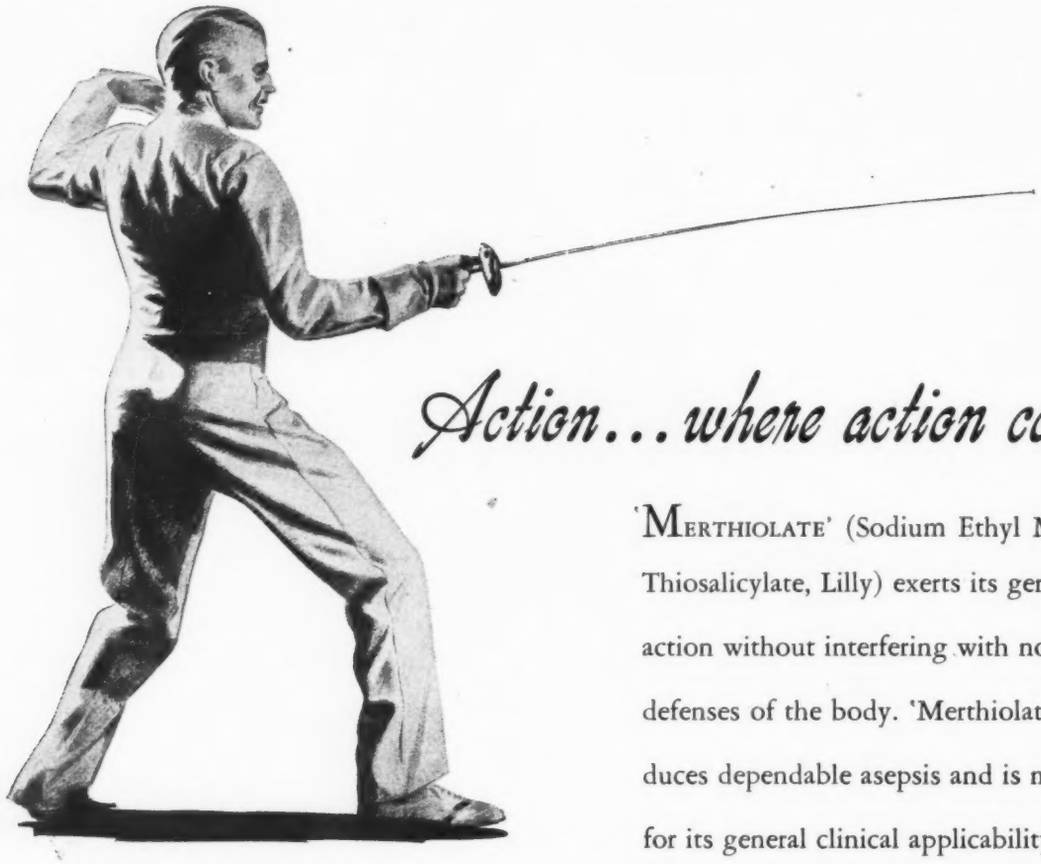

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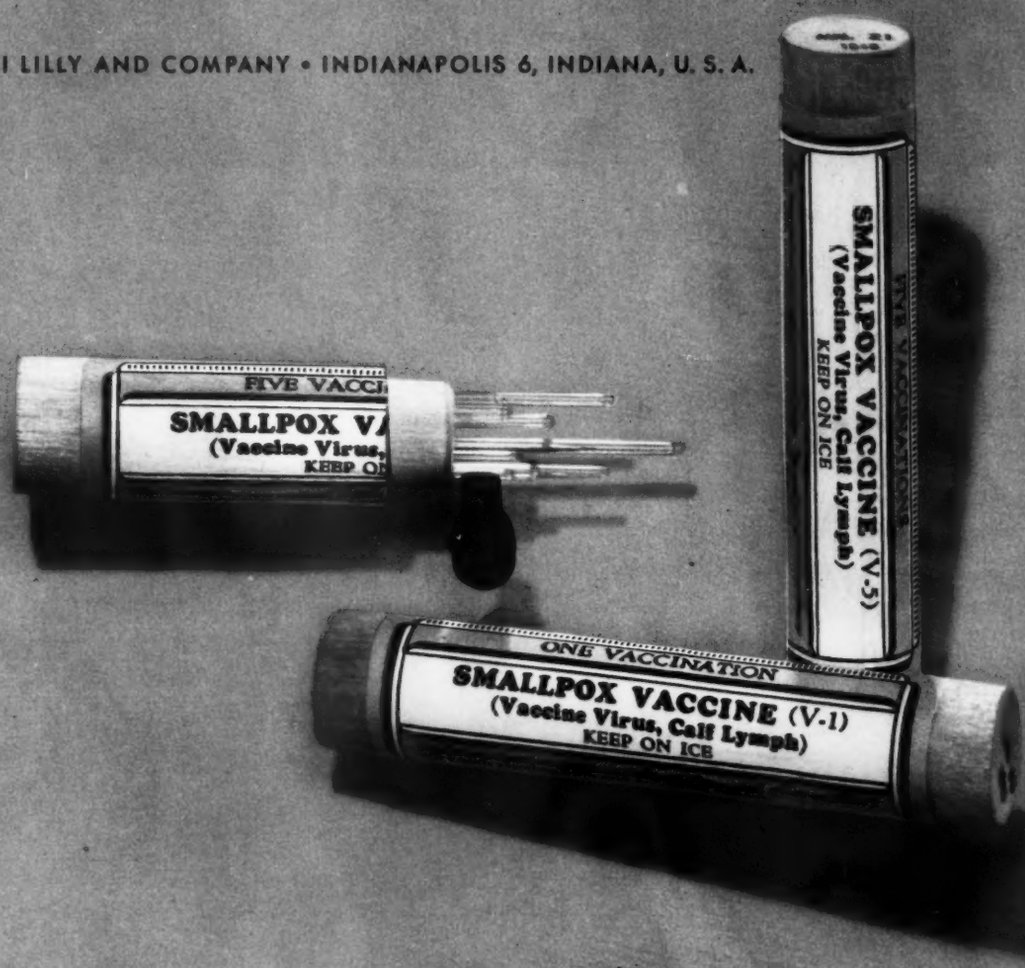

ILLUSTRATION BY HERMAN GIESEN

For the common good

TIRED AND WORN by the demands of the busy day, the average physician would much prefer home and family to an evening meeting of his medical society. He would like nothing better than a few hours of complete rest and relaxation. Medical progress, however, demands that he be ever alert. Or if he happens upon an experience which may be helpful to others, he willingly shares it. Advancement in medical practice must be common knowledge in order that people in general may benefit.

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